

# DOCUMENT RESUME

ED 040 300

08

VT 011 351

AUTHOR Kerr, Elizabeth F.; And Others  
 TITLE An Analysis of Selected Educational Programs in Practical Nursing. Final Report--Part II.  
 INSTITUTION Illinois Univ., Urbana. Dept. of Vocational and Technical Education.; Iowa Univ., Iowa City. Coll. of Medicine.  
 SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.  
 BUREAU NO BR-5-0126  
 PUB DATE Jan 69  
 CONTRACT OEC-5-85-038  
 NOTE 227p.  
 EDRS PRICE MF-\$1.00 HC-\$11.45  
 DESCRIPTORS \*Admission Criteria, Curriculum, \*Educational Programs, Faculty, \*Health Occupations Education, Organization, \*Practical Nurses, \*Program Evaluation, Role Perception, Teacher Attitudes  
 IDENTIFIERS Illinois, Iowa

## ABSTRACT

Data were collected through instruments and personal interviews from coordinators and faculty of 45 practical nurse education programs (16 in Iowa and 29 in Illinois) to determine characteristics related to student selection criteria and procedures, organizational structure, curriculum, and opinions and perceptions of faculty members. Comparison of nursing functions performed by employed LPNs (reported in Part I, VT 011 350) with the emphasis given these functions in the educational program was accomplished by utilizing card-sort procedures. All but six of the programs were supported by public funds and administered by local school boards, area community colleges or vocational-technical schools, universities, and public hospitals. All but nine of the faculty, all of whom were women, were registered nurses. Curriculums were covered within a 52-week period and provided early clinical experience for short periods of time, increasing gradually for the last 30 weeks. Comparison of functions revealed that there is a definite difference in the way faculty members view the role of the LPN and the way the employed LPN views her role. (SB)

ED0 40300

FINAL REPORT - PART II

Project No. 5-0126  
Contract No. OE-5-85-038

(Proposal Title: An Integrated, Longitudinal Study  
of Practical Nursing)

AN ANALYSIS OF SELECTED EDUCATIONAL  
PROGRAMS IN PRACTICAL NURSING.

Elizabeth E. Kerr, Dale F. Petersen, Carole B. Hoadley  
Lewis D. Holloway, and Donna J. Davis

January, 1969

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Program in Health Occupations Education  
Division of Health Affairs  
The University of Iowa  
Iowa City, Iowa  
Elizabeth E. Kerr, Associate Investigator

In Cooperation With

Department of Vocational and Technical Education  
College of Education  
University of Illinois  
Urbana, Illinois  
Robert M. Tomlinson, Principal Investigator

U. S. Department of  
Health, Education, and Welfare  
Office of Education  
Bureau of Research

U.S. DEPARTMENT OF HEALTH, EDUCATION  
& WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRODUCED  
EXACTLY AS RECEIVED FROM THE PERSON OR  
ORGANIZATION ORIGINATING IT. POINTS OF  
VIEW OR OPINIONS STATED DO NOT NECES-  
SARILY REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY

VT011351

## ACKNOWLEDGMENTS

This Study and Report were made possible by the excellent cooperation of the many who contributed to their successful completion.

Basic to the entire endeavor was the cooperation willingly afforded by administrators of the agencies under whose control the programs in practical nursing were offered. In turn, the faculty members and students in those programs not only very adequately met our specific requests, but during their participation, consistently promoted a friendly and spirited climate; this served to heighten the gratifications of the researchers and made an enjoyable task of what otherwise may have been a routine one. All of them deserve a special note of appreciation.

The authors are especially grateful to Dr. Robert M. Tomlinson, Associate Professor, Department of Vocational and Technical Education, College of Education, University of Illinois; and Principal Investigator of the total Practical Nursing Study of which only a portion is reported in this document. His able leadership and guidance provided invaluable assistance from which the authors derived much benefit.

Our gratitude is expressed to Mrs. Phyllis Ann Hebbel and Miss Phyllis Ann Franck, both of Iowa, who made significant contributions by assisting in the preparation of items for the card-sort, a task which called on their experiences both as registered nurses and coordinators of programs in practical nursing.

Miss Virginia Dyer, Missouri State Consultant in Health Occupations Education, arranged with the Program in Practical Nursing at Jefferson City, Missouri, to cooperate with the research team in piloting the data collection instruments. Appreciation is extended to her and to all others who participated in instrument testing sessions.

Vital to the completion of this project were those involved with interviewing and with data collection, control, analysis and interpretation. In Illinois, these activities were carried out by Mrs. Lois M. Langdon, Warren Suzuki, Mrs. Lois Hindhede, Dr. Larry J. Bailey, Clarence Ash, Menno De Liberto, Glen R. Martin, Lewis R. Selvidge, and John F. Huck. In Iowa, the authors were assisted in these activities by F. Ronald Czaja. Out of the interactions of the entire research team there evolved, by each for all others, a deep and abiding respect, both professional and personal.

Administrative secretaries, Mrs. Cathie Kaufman in Iowa and Mrs. Bonnie Poulos in Illinois, and their respective secretarial staffs were largely responsible for expediting communications between the research

offices of the two States. Much gratitude is due them and especially to Mrs. Kaufman and her staff for the typing of this report.

Elizabeth E. Kerr, Associate Investigator  
Dale F. Petersen, Research Coordinator  
Carole B. Hoadley, Research Associate  
Lewis D. Holloway, Research Assistant  
Donna J. Davis, Research Assistant

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS . . . . .	i
LIST OF TABLES . . . . .	vii
DEFINITION OF TERMS . . . . .	xiii
 CHAPTER	
1. INTRODUCTION AND BACKGROUND . . . . .	1
OBJECTIVES AND OVERVIEW . . . . .	1
FOUNDATION PHASE . . . . .	2
PHASE I . . . . .	3
PHASE II . . . . .	3
2. RESEARCH PROCEDURES . . . . .	5
SELECTION OF PROGRAM SAMPLE . . . . .	5
DATA COLLECTION . . . . .	6
DATA ANALYSIS . . . . .	8
3. SELECTED CHARACTERISTICS OF PROGRAMS AND CRITERION CLASSES . . . . .	11
<p>Administrative Agency. Number of Years in Operation. Size of Community. Size of Programs. Number of Classes. Total Enrollments. Designa- tion of Criterion Class. Criterion Class Size. Criterion Class Faculty. Student-Faculty Ratio.</p>	
4. FACULTY . . . . .	23
SECTION 1: FACULTY MEMBERS HAVING NO CONTACT WITH CRITERION CLASS . . . . .	23
<p>Highest Educational Level Achieved and Degree Majors. Employment Stability.</p>	
SECTION 2: FACULTY MEMBERS HAVING CONTACT WITH CRITERION CLASS . . . . .	25
<p>Number. Sex. Race. Age, Marital Status and Type of Assignment. Number of Children. Educational Level of Fathers. Educational Level of Mothers. Occupations of Fathers. Occupations of Mothers. Size of Town of High School Graduation. Highest Educational Level</p>	

of Spouses. Occupations of Spouses. Highest Educational Level Achieved. Field of Baccalaureate Major. Field of Masters Major. Reasons for Accepting Present Faculty Position. Faculty Salaries. Source of Faculty Salaries. Future Employment Plans. Characteristics of Faculty Planning to Leave Their Present Position. Employment Stability.

5.	SELECTION OF STUDENTS . . . . .	47
	ELIGIBILITY CRITERIA. . . . .	47
	Minimum Age. Maximum Age. Minimum Education. Maximum Education. Exclusions Based on Personal Characteristics.	
	ADMISSION PROCEDURE . . . . .	49
	High School Transcript. Pre-testing. Personal Interview. Physical Examination. Immunizations. Personal References. Preliminary Stage. Intermediate Stage.	
	PERSONNEL INVOLVED IN DETERMINATION OF STUDENT SELECTION . . . . .	58
6.	CURRICULUM. . . . .	61
	LENGTH OF CURRICULUM. . . . .	62
	Starting Dates. Overall Length of Curriculum. Vacation Time. Weeks of "In School Time."	
	CURRICULUM AND CURRICULUM SEQUENCE. . . . .	64
	Utilization of Sequence. Two Phases of Curriculum. In School Study Hours. Concurrency of Classroom and Clinical Teaching. Faculty Involvement in Supervision of Student Clinical Experiences. First Clinical Experiences. Hours of Day in Clinical Areas. Number of Weeks -- 20 or More Hours of Clinical Experience. Learning Experiences in Advanced Phase. Weeks of Clinical Experience in Each Area of Instruction. Patterns of Clinical Rotations.	



	Page
AFFILIATING AGENCIES UTILIZED . . . . .	81
Number. Types. Administrative Control. Distance From Program.	
7. HOW FACULTY MEMBERS VIEW THE PERFORMANCE OF NURSING FUNCTIONS . . . . .	87
DEVELOPMENT OF FUNCTION STATEMENTS. . . . .	87
SECTION 1: RESPONSIBILITY SORT. . . . .	88
Procedure. Analysis of Sort. Level of Respon- sibility for Performance of Nursing Functions. Responsibility Level by Type of Clinical Area.	
SECTION 2: EMPHASIS SORT. . . . .	94
Procedure. Analysis of Emphasis Given Nursing Functions. Correlation Between Emphasis and Responsibility Sorts.	
SECTION 3: SELECTED COMPARISONS BETWEEN CARD SORTS DONE BY THREE GROUPS. . . . .	99
Importance of Nursing Functions Determined by Employed LPNs Compared With the Emphasis Given Functions by Faculty Members.	
8. FACTOR ANALYSIS . . . . .	103
Identification of Commonalities Among Nursing Functions as Emphasized by Faculty Members.	
FACTOR I. . . . .	105
FACTOR II . . . . .	110
FACTOR III. . . . .	114
FACTOR IV . . . . .	118
FACTOR V. . . . .	122
FACTOR VI . . . . .	123
FACTOR VII. . . . .	124
FACTOR VIII . . . . .	128
FACTOR IX . . . . .	129
SUMMARY OF CHAPTER. . . . .	130
9. SUMMARY AND DISCUSSION. . . . .	133
Selected Characteristics of Programs. Selected Characteristics of Criterion Class Faculty. Selection of Students. Curriculum. Performance of Nursing Functions.	

	Page
LIST OF REFERENCES. . . . .	137
APPENDIX A. . . . .	140
APPENDIX B. . . . .	160
APPENDIX C. . . . .	164
APPENDIX D. . . . .	188



## TABLES

Chapter 3	Page
3.1 Administrative Agency of Programs . . . . .	13
3.2 Number of Years Programs in Operation (As of June 30, 1966). . . . .	13
3.3 Comparison of Growth in Public and Private Programs, Illinois and Iowa, 1948-1965. . . . .	14
3.4 Size of Community in Which Programs Located . . . . .	15
3.5 Number of Classes Admitted by Programs During 1966-67 School Year . . . . .	16
3.6 Student Enrollment in Programs During 1966-67 School Year. . . . .	16
3.7 Size of Criterion Class by Administrative Control . .	17
3.8 Size by FTE, of Criterion Class Faculty . . . . .	18
3.9 Mean Faculty FTE for Criterion Classes by Class Size.	19
3.10 Criterion Class Student-Faculty Ratios. . . . .	20
3.11 Mean Student-Faculty Ratios by Size of Criterion Class	20
3.12 Student-Faculty Mean Ratios by Source of Funds for Faculty Salaries. . . . .	21
 Chapter 4	
4.1 Educational Level of Faculty Members Employed Since July 1, 1961 and Terminated Prior to Admission of Criterion Class . . . . .	24
4.2 Number of Years Employed in a Program for those Terminating Prior to the Criterion Class Year, by the Number of Years the Program had been in Operation . .	26
4.3 Employment Status, Assignment, Age and Marital Status of Faculty Members . . . . .	29

Chapter 4 (cont)	Page
4.4 Assignment by Employment Status . . . . .	30
4.5 Age Characteristics of Faculty Members. . . . .	30
4.6 Number of Children. . . . .	32
4.7 Highest Educational Level Achieved by Fathers . . . .	33
4.8 Highest Educational Level Achieved by Mothers . . . .	33
4.9 Occupations of Fathers. . . . .	34
4.10 Occupations of Mothers. . . . .	35
4.11 Size of Town of High School Graduation. . . . .	35
4.12 Highest Educational Level of Spouses. . . . .	36
4.13 Level of Spouses Occupation . . . . .	36
4.14 Highest Educational Level Achieved by Criterion Class Faculty Members . . . . .	37
4.15 Present Work-Education Involvement. . . . .	38
4.16 Field of Baccalaureate Degree Major . . . . .	38
4.17 Field of Masters Degree Major . . . . .	39
4.18 Reasons for Accepting Present Faculty Position. . . .	40
4.19 Annual Salaries of Full-Time Coordinators and Instructors . . . . .	40
4.20 Annual Salaries of Full-Time Faculty. . . . .	41
4.21 Median Salaries of Full-Time Faculty. . . . .	41
4.22 Source of Faculty Salaries. . . . .	42
4.23 Future Employment Plans . . . . .	43
4.24 Future Employment Plans of those Planning to Leave Present Position. . . . .	44
4.25 Number of Years those Employed in a Program at Beginning of Criterion Class Year had been Previously Employed in that Program. . . . .	46

Chapter 5		Page
5.1	Minimum Age for Admission . . . . .	47
5.2	Maximum Age Limit for Admission . . . . .	48
5.3	Minimum Education Required for Admission. . . . .	48
5.4	Consideration of High School Grade Point in the Selection Process . . . . .	50
5.5	Number of Pre-Test Sessions Per Applicant . . . . .	51
5.6	Agency or Institution Conducting First Pre-Test Session . . . . .	51
5.7	Agency or Institution Conducting Second Pre-Test Session . . . . .	52
5.8	Number of Interviews Per Applicant. . . . .	53
5.9	Person(s) Conducting Initial Interview with Applicant . . . . .	53
5.10	Person(s) Conducting Second Interview with Applicant . . . . .	54
5.11	Person Conducting Physical Examinations . . . . .	54
5.12	Dental Examination Admission Requirement. . . . .	55
5.13	Immunization Requirement for Admission. . . . .	56
5.14	Types of Immunizations Required for Admission . . . . .	56
5.15	Chest X-Ray Requirement for Admission . . . . .	57
5.16	Stages of Application in Which Personal References Were Required . . . . .	57
5.17	Method of Applicant Selection . . . . .	59
Chapter 6		
6.1	Time Off Granted During Program (Based on 52 weeks)	63
6.2	Time of Year Full Weeks Off Were Granted (Based on 52 Weeks) . . . . .	63

Chapter 6  
(cont.)

Page

6.3	Full Weeks of Actual In-School Time (Based on 52 weeks - 5 days/week). . . . .	64
6.4	Degree of Utilization of Curriculum Sequence. . . . .	64
6.5	Number of Weeks in Basic Phase of Curriculum. . . . .	65
6.6	Areas of Instruction in Advanced Phase. . . . .	67
6.7	Number of Scheduled In-School Study Hours Per Week. . . . .	67
6.8	Degree of Faculty Involvement in Supervision of Students in Clinical Areas. . . . .	68
6.9	Week of First Occurrence of Selected Types and Amounts of Clinical Experiences . . . . .	70
6.10	Hours of Day in Clinical Areas - First Week of Minimum of 20 Hours Clinical Experience . . . . .	72
6.11	Number of Weeks - 20 or More Hours Clinical Experience. . . . .	73
6.12	Number of 14 Special Areas Utilized for Observations or Clinical Experiences . . . . .	75
6.13	Number and Types of Experiences Provided in 14 Special Areas . . . . .	76
6.14	Types of Experiences Provided in 14 Special Areas . . . . .	76
6.15	Observational and Clinical Experiences in Special Areas . . . . .	77
6.16	Number of Weeks in Each Clinical Area . . . . .	79
6.17	Number of Days of Clinical Experience - 6-11 P.M., 11 P.M.-7 A.M. . . . .	80
6.18	Type of Compensation Given Students by Affiliating Clinical Agencies . . . . .	81
6.19	Number of Affiliating Agencies Utilized . . . . .	82
6.20	Number and Types of Affiliated Agencies Utilized. . . . .	83
6.21	Affiliating Agencies, by Administrative Control, Type, Bed Size and Distance from Program. . . . .	85

<b>Chapter 7</b>	<b>Page</b>
7.1 Number of Functions to be Performed by Responsibility Level, as Viewed by 245 Faculty Members . . . . .	91
7.2 Rank Order of Top 20 Functions by Level of Responsibility. . . . .	92
7.3 Rank Order of Fifteen Functions Given the Most Emphasis by Faculty Members . . . . .	97
7.4 Correlation between Faculty Emphasis Sort and Responsibility Sort (N=243) . . . . .	98
7.5 Types of Sort, by Group . . . . .	99
7.6 Rank Order of Fifteen Functions with Greatest Absolute Difference Between Importance and Emphasis Sorts (Theoretical Mean for Both Sorts is 4.03) . . . . .	101
<b>Chapter 8</b>	
8.1 Factor I-A: Routine Care of Patient Unit and Patient Assisting Activities Involving Apparatus or Devices for Less Dependent Patients . . . . .	105
8.2 Factor I-B: Nursing Functions Involving Intravenous Solutions and Supervisory, Judgmental Activities in Dealing with Legal Signatures and Physician's Orders. . . . .	107
8.3 Factor II-A: General Patient Care Activities in an Assistive Role to Less Critically Ill . . . . .	111
8.4 Factor II-B: Functions Related to the Administration of Medications. . . . .	112
8.5 Factor III-A: Supportive Patient Care Activities in a Nursing Environment. . . . .	114
8.6 Factor III-B: Higher Level Patient Care Activities Requiring Judgment for Highly Dependent Patients. . . . .	115
8.7 Factor IV-A: Observing, Recording, Reporting and Coordination Activities in the Nursing Unit . . . . .	118
8.8 Factor IV-B: Specialized Nursing Functions Requiring a High Level of Judgment. . . . .	119
8.9 Factor V: Genito-Urinary Procedures Requiring Skill in Manipulative Technique and Personal-Emotional Individual Relationships. . . . .	122

**Chapter 8**  
**(cont.)**

**Page**

<b>8.10</b>	<b>Factor VI: Maternity and New-Born Patient Care . . .</b>	<b>123</b>
<b>8.11</b>	<b>Factor VII-A: Surgical and Surgically Related Activities . . . . .</b>	<b>125</b>
<b>8.12</b>	<b>Factor VII-B: Supportive Role with More Dependent Patients . . . . .</b>	<b>126</b>
<b>8.13</b>	<b>Factor VIII: Specialized Services and Clinical Testings . . . . .</b>	<b>128</b>
<b>8.14</b>	<b>Factor IX: Supervisory, Coordinating and Teaching Activities . . . . .</b>	<b>129</b>

## DEFINITION OF TERMS

This report uses terminology common and accepted in the nursing field. For purpose of clarification preceeding the report of this study, several terms are defined below. Additional terms used in the study will be defined in later sections where they are related to a specific part of the content.

Nursing: ". . . one of the resources in a community for the care of the sick, the prevention of illness, and the promotion of health which is carried on under medical authority. Its distinctive function is the close and individualized service to the patient which may vary with his state of health from one of dependence, in which the nurse performs for him what he cannot do for himself, through supportive and rehabilitative care, physical and emotional, to self-direction of his own health. Nursing is primarily patient-centered. It gives service directly through treatment, general physical care, and health instruction to the patient and his family and through the coordination of nursing with other community services essential to the patient's health needs." (NLN, 1961, page 21).

Registered Professional Nurse (RN): graduate of an educational program in nursing who has been licensed to practice professional nursing by the appropriate authority in each state. The American Nurses' Association has proposed (ANA, 1965, page 8) that the minimum preparation for professional nurses should be a baccalaureate degree and those RNs whose preparation is at less than the baccalaureate level should be known as technical nurses. "Technical nurse" is being used in some recent registered nursing association publications when reference is made to the RN who has completed a diploma or associate degree but not a baccalaureate curriculum. Approximately 80% of all RNs, however, have received their basic preparation in diploma programs.

Professional nursing: ". . . performance for compensation of any act in the observation, care, and counsel of the ill, injured, or infirm, or in the maintenance of health and prevention of illness of others, or in the supervision and teaching of other personnel, or the administration of medications and treatments as prescribed by a licensed physician or dentist, requiring substantial specialized judgment and skill and based on knowledge and application of the principles of biological, physical, and social science. The foregoing should not be deemed to include acts of diagnosis or prescription of therapeutic or corrective measures." (NLN, 1965, Appendix II, page 38).



Licensed Practical Nurse (LPN): a person who has been issued a license to engage in the practice of practical nursing by the appropriate authority in a state. In Texas and California a person holding an equivalent license and title is referred to as a Licensed Vocational Nurse (LVN). A 1962 published statement of the National League for Nursing defined the LPN or LVN as one prepared for two roles: (1) under the supervision of a registered professional nurse or physician, to give nursing care to patients in situations relatively free of scientific complexity; and (2) in a close working relationship, to assist professional nurses in giving nursing care to patients in more complex situations. (NLN, 1962, page 9.)

The purpose of this study is to determine the functions that these personnel are in fact performing after having completed a practical nurse preparatory program and becoming licensed as a practical nurse.

Practical Nursing: ". . . performance for compensation of selected acts in the care of the ill, injured, or infirm under the direction of a registered professional nurse or a licensed physician; such acts would not require the substantial specialized skill, judgment, and knowledge of professional nursing." (NLN, 1965, Appendix II, page 39.)

Program in Practical Nursing: "usually one year in length, this curriculum is self-contained, complete and satisfactory for its own purpose, preparing exclusively for practical nursing. Its objective is to prepare a worker who will share in giving direct care to patients. The practical nursing program is intended for individuals who will find satisfaction in performing duties commensurate with their basic nursing preparation and with further competencies gained through continuing education and experiences in nursing practice.

A program leading to a certificate or diploma in practical nursing may be organized and operated under public education, hospitals, or other community agencies. Most are administered through the public school system. The next largest number are controlled by hospitals. A few are under universities, colleges, and community agencies." (NLN, 1962, pages 9-10.) Since 1962, however, there has been a marked trend to establish programs in junior or community colleges, most often public educational institutions where costs are borne by public tax monies rather than by patients which is usually the case in hospital-based programs.

Licensing Agencies: The legally established regulatory agency responsible for educational standards of practical nursing programs, students, licensure and practice. In Illinois this authority is vested in the State Department of Registration and Education; the Committee of Nurse Examiners (RNs) is advisory to this Department. The State Board of Nursing is the comparable agency in Iowa.

Vocational Education Branch, State Department of Education: cooperates with public education institutions as they administer programs in practical nurse education which are partially funded by state and federal funds appropriated for this purpose.

State-Approved Programs in Practical Nursing: curricula accepted by the licensing agencies, or appropriate agencies in other states. Only graduates of programs approved by these agencies are eligible for examination to become licensed practical nurses. Programs operated in cooperation with a Vocational Education Branch of a State Department of Education must be approved by this Branch also.

State Board Examination: a written test of competence administered by the licensing agency. Upon passing the examination, the individual is eligible for licensure as a practical nurse and may use the title "Licensed Practical Nurse".

Practical Nursing Study (PNS): a 45-month research project, conducted from June 1965 through August 1969. An Integrated, Longitudinal Study of Practical Nursing, USOE Contract No. 5-85-038, by the University of Illinois in cooperation with the University of Iowa. Funds were provided by the U.S. Office of Education under the Vocational Education Act of 1963, Section 4 (c).

Criterion Class: One class in each of the programs participating in this study. These 45 classes were admitted in the 1966-67 school year, either in the fall or the winter depending upon the scheduled admission date for the class(es) in each program.

## CHAPTER 1

### INTRODUCTION AND BACKGROUND

This publication is the second of a series to report the results of research findings and related materials developed from a project funded by the United States Office of Education and entitled An Integrated, Longitudinal Study of Practical Nursing. The study is conceived to be a comprehensive approach to establishing the dimensions of the practical nursing field. Its primary purpose is to develop a body of current data and to identify trends in order to provide the basis for sound judgments in planning future developments in practical nursing.

In terms of burgeoning technical advances and constantly increasing demands for skilled personnel to use them, the health occupations are among those expanding most rapidly. Expansion of training programs and the recruitment of students, however, have lagged markedly behind past and current needs. As increases in population and greater demands for services continue to exceed the capacity of educational programs to prepare the needed personnel, critical shortages will continue to exist and grow more intense.

In the health field, these new techniques and widening demands for more complete health services have led to recognition of many specialties; therefore, a wide range of occupational choice exists in this area today. However, the interests of potential students, employers, and the public require that potential applicants for the health occupations be prepared for, and employed at, their highest level of ability and practice, but not above their best assured competence.

The relatively recent emergence of the practical nurse has provided a new career opportunity for many, mostly women. Present practices and images are the result of actions and events which occurred earlier and under different circumstances than those which exist today. At best, future developments will be guided by impressions and judgments based on available data. Decisions on utilization of the data and findings to implement changes in the educational program and employment performance will have to be determined by those competent to make judgments appropriate to the particular situation.

Hence, a study such as this is appropriate to describe conditions, assess the present status, and develop a profile of practical nursing. The results should be of significant value as a basis for predictions which will be needed in later stages of educational and occupational planning.

### OBJECTIVES AND OVERVIEW OF THE STUDY

The long-range goal of this study is the improvement of nursing service through the improvement of the selection process, educational

programs (including both curriculum and instructional staff) and better utilization of prepared personnel in the field of practical nursing. This study does not attempt to implement change; but rather, in meaningful manner, to provide new knowledge and relationships which may be applied by those directly responsible for preparing practical nurses and utilizing their services.

The general hypothesis of the study is that there exist differential and identifiable characteristics among: (1) potential and actual students, (2) approved practical nursing programs, and (3) employment situations; and, that meaningful relationships among these characteristics can be determined. Findings from an investigation of these characteristics and the relationships among them should serve to improve the quantity and quality of available nursing services.

The complete study involved three separate but closely related and interdependent phases. Each phase was concerned with general objectives and a series of sub-objectives to establish the major characteristics, trends, and relationships of that particular phase and provided data and measures to be utilized in comparative analyses with the other phases. Following instrument development and pilot testing and staff training sessions, data were collected concurrently by research teams in each of two States, Illinois and Iowa.

Foundation Phase. This phase studied a 10% sample of all persons ever issued a license to practice practical nursing in Illinois or Iowa, with particular emphasis on those who had obtained their license following completion of an approved educational program. Its purpose was to identify the personal, social, educational, demographic, and employment characteristics and trends of the current population of licensed practical nurses.

Basic data were obtained from the records of the Illinois Department of Registration and Education and the Iowa Board of Nursing, the official licensing agency in the respective states. Through follow-up procedures, additional data were obtained on all persons in the sample who had an active license for the 1966 licensure year, were residents of the state at the time of their last licensure renewal and who had been licensed on the basis of having completed an approved preparatory program in practical nursing and passed the licensure examination.

The foundation phase was carried out with independent responsibility in each state, under separate funding arrangements. In Iowa, it was supported jointly by the Research Coordinating Unit, Division of Vocational Education, Iowa Department of Public Instruction; and the Program in Health Occupations Education, Division of Health Affairs, The University of Iowa. In Illinois, it was supported jointly by the Research Coordinating Unit, Division of Vocational and Technical Education, Board of Vocational Education and Rehabilitation; and the Department of Vocational and Technical Education, College of Education, University of Illinois. In addition to providing results within its own objectives, each of these sub-studies are reported in the following three publications:



Tomlinson, Robert M., Ash, C.L., Langdon, Lois M. and Suzuki, W.N., Practical Nursing in Illinois. A Profile, Department of Vocational and Technical Education, University of Illinois, Urbana, Illinois, 1967;

Kerr, Elizabeth E. and Petersen, Dale F., Iowa Practical Nursing Sub-Study, The University of Iowa Printing Service, Iowa City, Iowa, 1967;

Kerr, Elizabeth E., Petersen, Dale F. and Czaja, F. Ronald, Practical Nursing in Iowa: A Profile, The University of Iowa Printing Service, Iowa City, Iowa, 1968.

Research activities beyond the foundation phase were funded by the U. S. Office of Education and conducted in two distinct phases:

Phase I. A selected sample of currently employed practical nurses in representative employment locations was studied to identify the occupational patterns, functions performed, and level of responsibility for performing these functions according to type of employment.

This phase of the Iowa-Illinois Practical Nursing Study consisted of identifying and selecting employment locations on the basis of the employment distribution reported by those in the 10% sample identified during the foundation phase. Personal interviews were conducted with these licensed practical nurses, their R.N. supervisors, nurse aides who worked with them, and the administrator of the institution which employed them. The interviews were designed to gather demographic and other personal data that might be expected to vary with the level at which the individual functioned within a health-care setting. This included complete educational and occupational histories of each of the interviewees. Perhaps more important were the data gathered concerning the actual role of the LPN in the employment setting. A carefully-designed Q-sort was used to elicit the perceptions of LPNs, RNs, and nurse aides as to importance of the tasks and functions performed by the LPNs and the level of responsibility at which she functioned. Data concerning the institution's size, type of control, type of service, and salary scales for nursing personnel were gathered from the administrator. The results of this phase of the study are reported in Part I of the four-part final report of the total project and is published as:

Tomlinson, Robert M., Bailey, Larry J., Hindhede, Lois A. and Langdon, Lois M., Occupational Patterns and Functions of Licensed Practical Nurses, University of Illinois College of Education, Urbana, Illinois, 1969.

Phase II. Programs in practical nurse education (faculty, policies, and curriculum) and their applicants, students, and graduates were studied to:

(1) determine the characteristics of the programs and those criteria related to student success and the employment performance of their graduates; and,

(2) determine the characteristics of applicants, students, drop-outs, and graduates of the programs; and their relationship to each other.

During this phase, data similar to that collected from the LPNs, RNs and nurse aides during Phase I were collected from the faculties of 45 programs (16 in Iowa and 29 in Illinois) to be used for comparisons. Also collected from these 45 programs were data concerning their selection procedures and criteria used for screening applicants, organizational structure, the curriculum, and the opinions and perceptions held by faculty members. The report of this portion of Phase II is the publication in hand which is Part II of the four-part final report of the total project.

In addition to data collected on programs and faculties, data from school records were compiled on all persons who applied to the 45 programs; the students enrolled in the programs were studied intensively during three separate visits within the criterion class year; and, questionnaire surveys were conducted on all applicants who did not enter the program, who entered but did not complete the program with their class, and who graduated from the programs.

The portion of Phase II having to do with applicants, enrollees, drop-outs and graduates is reported in Part III of the final report.

Part IV of the four-part final report will be entitled Summary and Final Report of the Practical Nursing Study. It is a summary of the total study and provides comparisons of selected characteristics and variables reported in Parts I, II and III.

## CHAPTER 2

### RESEARCH PROCEDURES

In this report, a practical nurse education unit, whether administered by an educational institution (public school system) or a hospital (primarily a service institution), is referred to as a "program." This is to identify the unit as a distinct entity within an administrative agency, most often a school, which offers instructional units in several fields of preparation. All programs in Illinois and Iowa are state-approved by the respective State licensing agency; also, those partially funded by state and federal monies are approved by the respective State Department of Education.

#### SELECTION OF THE PROGRAM SAMPLE

In the planning stage of this project it was determined that if all combinations of type, control, support, and other characteristics of programs were to be studied, it would be necessary to select a sample consisting of the largest possible number of programs. Yet, because practical nursing programs were being established at a rapid rate, concern for retaining a high degree of reliability in the data required that one criterion for the selection of programs be established: any program participating in the study must have graduated at least one class of practical nurses prior to the fall of 1966.

In Iowa, of the 22 programs which admitted students in the fall of 1966, 16 met the established criterion. At that same time, 31 programs in Illinois enrolled students and all 31 met the requirement for participation. These 47 qualifying programs were informed of the scope and purpose of the project and invited to participate. Forty five of the 47 accepted and agreed to cooperate; all 16 in Iowa and 29 of the 31 in Illinois. These 45 programs, with their faculties, applicants, students, drop-outs and graduates, became the sample for this phase of the study.

Because some of these 45 programs admitted more than one class per year, it was planned that only one class admitted to each program during the 1966-67 school year, hereafter referred to as a "criterion class," would be studied in detail. The criterion class was specified to be the class enrolled in the fall or winter of 1966-67, depending upon the scheduled admission dates of programs.

Each part of the four-part final report documents a particular facet of the project and includes a description of the procedures used in the collection of data for that facet. Therefore, the reader is referred to Part I for the procedures used in the employment phase of the project; to Part III for the procedures used in the collection of data concerning students, graduates, drop-outs and applicants to the 45 programs in the sample; and to Part IV for procedures utilized in synthesizing the findings of Parts I, II and III. The document in hand reports Part II of the final four-part report and is primarily concerned with the characteristics of the educational programs and their instrument development and testing.

Since many different instruments were used throughout the total project, it was necessary to develop a separate coding format for each and



a coding system applicable for common use with as many instruments as possible. As new instruments were developed, an effort was made to anticipate the response range and to develop a code system accordingly. Once a code family was developed, e.g. for marital status, it was assigned a number and catalogued in the total coding system. As the instruments increased in number, the master code index became more voluminous because it was necessary to revise or expand some codes as new or different responses were encountered.

This procedure facilitated the personal interview technique which was utilized extensively throughout the project; the interviewer could interpret the responses of the interviewee and immediately record them by code number on the interview format sheet. It also promoted greater efficiency in the data collection and keypunching processes.

All instruments utilized in the collection of program and faculty data were designed by the research staff. During its development, each instrument was subjected to scrutiny by many individuals. When the instruments to be used in a particular data collection session were once in mimeographed form, a pilot session was scheduled at a non-participating program. The entire data collection procedure, as planned for a program visit, was tested. All researchers who were to be involved in the data collection process participated in the pilot sessions; some administered the instruments, some duplicated the coding of interviews, and some observed for weaknesses in the instrument and reactions from the subjects. A review session followed each pilot session, at which time the research staff discussed and initiated any necessary revisions to instruments, codes or procedures. After these revisions were completed, a second pilot session was scheduled if necessary. Based on experiences with the pilot sessions, notations were made relative to interpretations of the instructions and items. These notes were used as references at the time of data collection.

The pilot and review sessions, attended by all research staff members, served as staff training sessions; the more experienced members conducted the sessions and the others observed and participated in other ways. The magnitude of this project was such that it required multiple groups to collect the data. Therefore, throughout the project, a great effort was made to maintain the highest level of reliability within and between data collection teams. Copies of instruments used in the collection of data reported in this document, Part II of the IV Part final report, may be found in Appendix A.

#### DATA COLLECTION

During the 1966-67 school year, three data collection sessions were held at each of the 45 programs. These sessions were conducted concurrently by research teams in the two States. During each session, two separate but interdependent types of activities were involved: one group of researchers worked with students to collect student oriented data while another group worked with faculty members of the program to collect program and staff oriented data. The procedures outlined in this chapter primarily deal with the collection of program and staff data and are described below.

### First Data Collection Visit

The first task was to interview the professional nurse coordinator/director, using an interview format designed to elicit such program characteristics as: administrative control, beginning and ending dates of school year, size of criterion class, number of classes admitted during the year, student selection procedures, student costs and number of faculty members.

The second aspect of this first visit involved collection of staff oriented data. A personal interview was held with each faculty member of the program. The instrument used was designed to elicit information about their educational history, field and level of preparation, past occupational history, current position and other personal characteristics. The instrument was purposefully similar to the interview format utilized in the employment phase of the project. This provided a means of comparing the characteristics among employed licensed practical nurses, registered professional nurses, and instructors in practical nursing programs.

In addition to the interview, each faculty member completed a card-sort of 99 nursing functions; 97 of the 99 were identical to those utilized in the employment phase of the study. (See Part I, Chapter 5 of the final report for a complete description of the Q-sort methodology.) However, instead of sorting these functions as the employed LPN did in Phase I of the study (on the basis of importance in the practical nurses' job), professional nurse faculty members were asked to sort them on the basis of the emphasis they were given in the educational program. They were also asked to sort these same 99 functions on the basis of the responsibility they would expect one of their graduates to assume while performing the function in an employment situation one year from date of graduation. The procedures for completing these emphasis and responsibility sorts were designed to parallel those used for the sorts done by employed practical nurses, supervising RN's and nurse aides, as described in Part I of the final report. This provided a basis for comparing the functions of the employed LPN with the curriculum content offered in the practical nurse preparatory programs.

Also during the first data collection visit, an instrument was utilized to record the historical development of each program. This instrument was designed in two parts: part one was used to record class and student data; part two, to record the history of the faculty in terms of number, educational preparation and the amount of time each was employed during a particular year. This form, left with the professional nurse coordinator/director at the time of the first visit, was to be completed by her and returned to the research team on its second visit to the program.

### Second Data Collection Visit

The second visit involved three tasks. The first utilized an instrument designed to elicit from each professional nurse faculty member, data pertaining to how she perceived the place of the practical nurse program

within the total structure of the administrative agency; whether or not the organizational structure and the policies and procedures are in writing; and whether or not they have been effectively communicated to faculty members.

The second task was the administration of a student evaluation form. Faculty members were asked to assign their students decile rankings based on three different criteria: (1) classroom achievement, (2) clinical achievement, and (3) patient relationships. This process was completed twice during the course of the program; once during the second visit (about 2/5 of the way through the total program), and again immediately after the class had completed and graduated from the program. During the latter time, in addition to assigning decile rankings to the students, the faculty members were asked to indicate which students they felt could have successfully completed a program in professional nursing. Originally, each instructor was asked to do the ranking of students independently but due to the need to divide a class into sub-groups for student rotations through multiple clinical areas, this became virtually impossible. Since at any given time a faculty member was responsible for only a portion of the class during their student clinical experiences, the decision was made to have instructors collectively rank the students on the basis of group decision. The findings on this portion of the study can be found in Part III of the four-part final report of the study.

The final task was to collect the historical data forms which were left with the professional nurse coordinator/director at the time of the first visit, and to review them with her for completeness.

### Third Data Collection Visit

On this final visit, the coordinator was again interviewed, this time to elicit the arrangements for clinical experiences provided in the program; the affiliating agencies which provided clinical areas for these experiences; the percentage of time each faculty member was involved in duties of administration, classroom teaching, and clinical teaching and supervision; and, the employment dates and salary source of each faculty member. The coordinator also completed an instrument designed to elicit course content; number of weeks devoted to each area of content; and the point in time, within the total length of the program, when each content area was taught. Three additional instruments were administered to each faculty member during this visit. They were designed to elicit her evaluation of program policy, factors she perceived as ones influencing her job satisfaction, and her plans for the future.

### DATA ANALYSIS

As data were collected, two procedures were used to transpose them to punch-card form for subsequent analysis. In addition to the standard method of keypunching, an optical scanning process, the "Digiteck" system, was utilized. This process, designed to utilize a generalized code response sheet, was used in two ways: (1) subjects were instructed by researchers to record their responses directly on the sheet, and (2) researchers interpreted data from answer sheets and coded their interpretations on the generalized response sheet. The latter was necessary

when responses to items required interpretation or were written responses to questions such as, "Why did you elect to teach in a practical nursing program?" Throughout the study, when interpreting and transposing data, a concerted effort was made to reduce the amount of error by having subjects code their own responses directly on an optical scanner form whenever possible. When this was not possible, an effort was made to control interpreter error by having the researchers, as a group, discuss the types of interpretations made and assemble a list of notes and interpretations to be used with a particular instrument, and by maintaining a log of those interpretations to gain uniformity and reduce errors.

Once data were in punched-card form, they were subjected to a review and "clean-up" process which included submitting the data decks to the computer for a listing of the data as they appeared on the cards and for a frequency count of the coded responses for each variable. Since data for one subject were contained on several card decks, cross-checks for consistency and accuracy were made. When necessary, errors or inconsistencies were compared with original responses, the necessary corrections in the card decks were made, and new frequency counts were made. Those data cards containing variables which were to be statistically analyzed in more depth were appropriately sorted, grouped or gang-punched to prepare them for further analysis.

The computer systems of both the University of Illinois and The University of Iowa were utilized in analyzing data for this report. Each maintains a complete library of computer programs which have the ability to analyze data while controlling on as many as four variables for the purpose of cross-classifications and comparisons. It was necessary for the research staff to determine what computations were needed, identify the appropriate computer program and make any necessary revisions for the desired applications. Statistical procedures most commonly used for this report included: percentages, means, standard deviations, chi-squares, and factor analysis.



## CHAPTER 3

### SELECTED CHARACTERISTICS OF PROGRAMS AND CRITERION CLASSES

Data reported in this Chapter were obtained from two sources: the Criterion Class I instrument and Program Historical Data, Part I.

#### DESIGN AND USE OF DATA COLLECTION INSTRUMENTS

The Criterion Class I instrument was administered in a personal interview with the program coordinator during the first data collection visit. The format was designed to elicit characteristics of each program in the following broad categories: (1) administration and budget, (2) criterion class statistics, (3) student selection requirements, (4) student costs, and (5) program faculty.

Program Historical Data, Part I was explained to the coordinator at the time of the first program visit and was to be completed by her and collected by the researchers at the time of the second visit. This instrument was used to record selected information about the program for each fiscal year it had been in operation. The format was designed to record: (1) date of admission of each class, (2) admission quotas and number of applicants, (3) enrollment statistics, (4) graduate statistics, and (5) licensure of graduates.

Copies of both formats can be found in Appendix A.

#### SELECTED CHARACTERISTICS

##### ADMINISTRATIVE AGENCY

The predominance of the 45 programs were supported by public monies. This reflects the evolution of practical nurse education. To a great measure, private institutions were the pioneers in this field. Traditionally, programs emerged in service institutions with a subordinate role in education. The costs of such programs are necessarily included as service charges and therefore borne by patients. Also, the mobility of our present work force precludes those trained in a given service institution to remain long enough to return services commensurate with the investment made. Many programs operated by service institutions have been discontinued due to financial stress. Increasingly, they are relinquishing the administration of their programs to public education systems with which they cooperate by continuing to make their clinical areas available for supervised student learning experiences. This is in keeping with a basic change in philosophy which embraces the principle of charging educational costs to educational institutions supported by public monies. Shifting the cost to a broad educational base seems appropriate and more compatible with the increased mobility of our labor force. As a result, during the past several years there

12/11

has been a rapid expansion of publicly-supported programs in practical nursing; however, there are some private programs which plan to continue, and some of these are contemplating increased enrollments.

At the time of data collection, Illinois had a proportionately higher number of programs administered by a local public school board than did Iowa where programs were more evenly distributed among all types of administrative agencies. The "local school board" category may be somewhat misleading since these boards administered programs conducted both by community or junior colleges and by an adult education division in high school settings.

In Iowa a new state-wide system of post-secondary institutions, authorized by Iowa Senate File 550, was being developed at the time of data collection. Some originated as vocational-technical schools, others as community colleges. Soon thereafter, some of those which originated as vocational-technical schools added a division of arts and sciences and became a community college. Therefore, it was imperative that the researchers be particularly cautious when assigning programs to the categories of "vocational-technical school" and "community college."

An additional complication in the identification of the legal administrative agency in Iowa was that increasingly, local school boards were transferring the administration of their practical nursing programs to these newly emerging area post-secondary schools. For example, at the time of data collection (during the 1966-67 school year), six of the Iowa programs in the sample were still under the jurisdiction of local school boards. In the interim, however, all six of these have been transferred to area school administration. In Illinois, somewhat similar situations existed but to a lesser degree.

At the time the 45 programs were studied, 39 (26 in Illinois and 13 in Iowa) were administered by public education agencies and the remaining six, by private service institutions (three in each State). The public programs were administered predominately by local school boards, but also by area community colleges, vocational-technical schools, universities, and a county hospital. The six private programs were administered by church-supported hospitals. See Table 3.1.

#### NUMBER OF YEARS IN OPERATION

Among the 45 programs, the number of years in operation prior to the time of data collection ranged from one to eighteen; 10 (22%) for over ten years and 35 (78%) for 10 years or less. See Table 3.2.

One program in each State began as early as 1948; the Iowa program was supported privately; the Illinois program, publicly. Between 1948 and 1955, relatively few new programs were established. During that time a limited amount of federal funds were available through existing vocational education Acts to support programs in practical nursing. Public Law 911, the Health Amendments Act of 1956, amended the

1946 George Barden Act by becoming Title II. Funds from this Title were used primarily for practical nursing education. This amendment provided specific funds for practical nursing programs administered by public agencies. As a result, since 1956 there has been a marked increase in the number of programs throughout the nation, and this growth trend has continued in Illinois and Iowa since the time of data collection for this study. The results of legislation enacted at both federal and state levels are graphically shown in Table 3.3

Table 3.1

ADMINISTRATIVE AGENCY OF PROGRAMS

Administrative Agency	Illinois		Iowa		Combined	
	N	%	N	%	N	%
<b>Public</b>						
Local School Board	23	(79.3)	6	(37.5)	29	(64.4)
Area Community College	1	( 3.5)	3	(18.8)	4	( 8.9)
Area Voc.-Tech. School			3	(18.8)	3	( 6.7)
University	1	( 3.5)	1	( 6.2)	2	( 4.4)
County Hospital	1	( 3.5)			1	( 2.2)
<b>Private</b>						
Church Supported Hospital	3	(10.3)	3	(18.8)	6	(13.3)
<b>TOTALS</b>	<b>29</b>	<b>(100.1)</b>	<b>16</b>	<b>(100.1)</b>	<b>45</b>	<b>(99.9)</b>

Table 3.2

NUMBER OF YEARS PROGRAMS IN OPERATION  
(As of June 30, 1966)

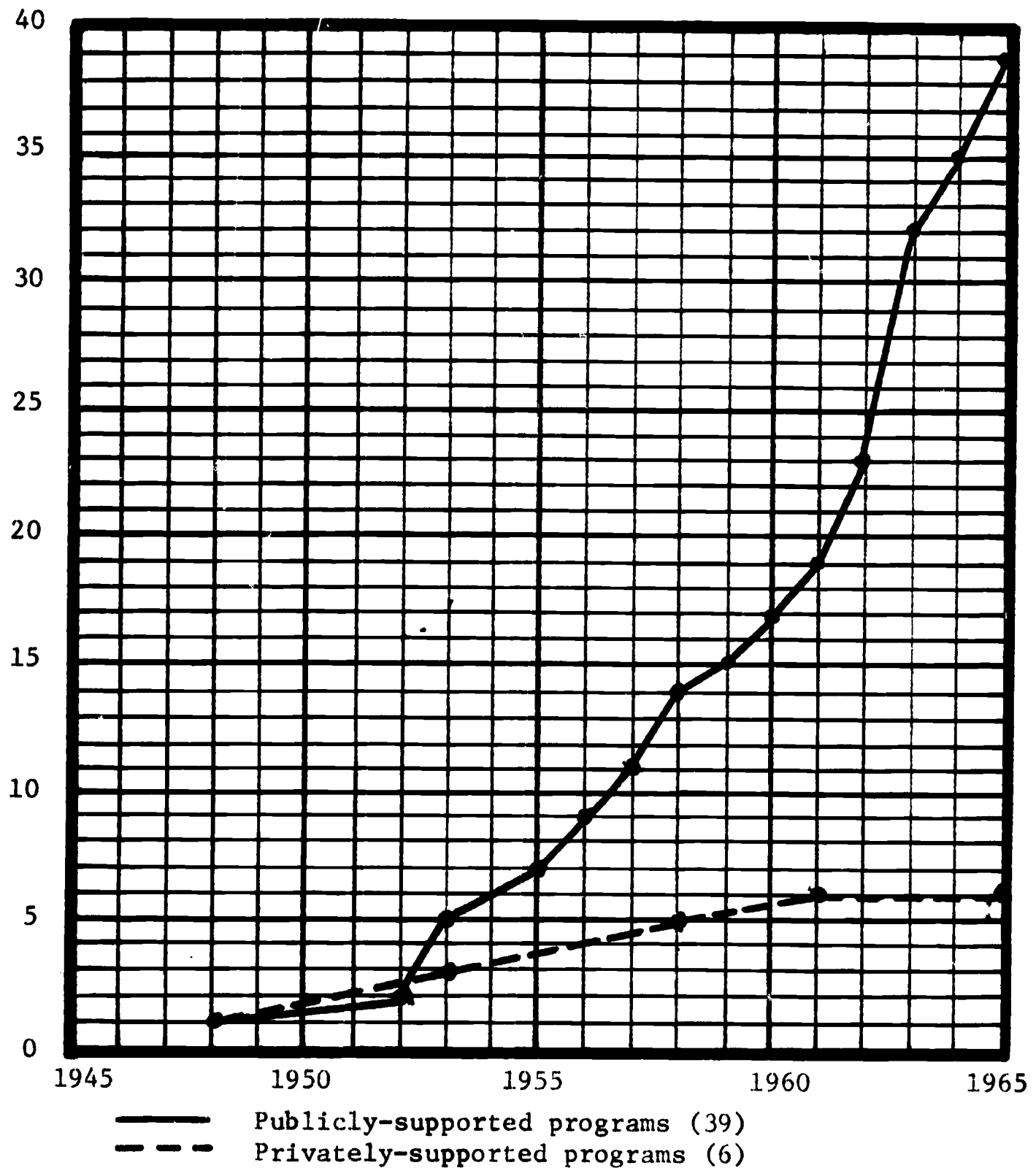
	1 Yr.		2-5 Yrs.		6-10 Yrs.		11-15 Yrs.		16 Yrs. or More		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Illinois</b>												
Private			1	(33)	1	(33)	1	(33)			3	(99)
Public	2	( 8)	11	(42)	8	(31)	4	(15)	1	( 4)	26	(100)
<b>Iowa</b>												
Private					1	(33)	1	(33)	1	(33)	3	(99)
Public	2	(15)	6	(46)	3	(23)	2	(15)			13	(99)
<b>TOTALS</b>	<b>4</b>	<b>( 9)</b>	<b>18</b>	<b>(40)</b>	<b>13</b>	<b>(29)</b>	<b>8</b>	<b>(18)</b>	<b>2</b>	<b>( 4)</b>	<b>45</b>	<b>(100)</b>



Table 3.3

COMPARISON OF GROWTH IN PUBLIC AND PRIVATE PROGRAMS  
ILLINOIS AND IOWA, 1948-1965

No. of  
Programs



## SIZE OF COMMUNITY

Sizes of communities in which the 45 programs were located varied from a population of slightly over 5,000 to 100,000 or more. The largest number of programs were in cities with a population of between 25,000 and 50,000. There was, however, a somewhat different pattern between the two States. While 25% of the Iowa programs were in cities under 10,000, this was true of less than 7% of the programs in Illinois where over 25% were in cities of 100,000 or more. See Table 3.4. These findings appear to reflect the general population distribution in each State; the percentage of smaller, more "rural" communities is greater in Iowa than in Illinois where there are more "urban" population centers.

Table 3.4

### SIZE OF COMMUNITY IN WHICH PROGRAMS LOCATED

Size of Community	Illinois		Iowa		Combined	
	N	%	N	%	N	%
5,000 - 7,000	1	( 3.4)	2	(12.5)	3	( 6.7)
7,000 10,000	1	( 3.4)	2	(12.5)	3	( 6.7)
10,000 - 15,000	2	( 6.9)			2	( 4.4)
15,000 - 25,000	4	(13.8)	1	( 6.2)	5	(11.1)
25,000 - 50,000	7	(24.2)	6	(37.5)	13	(28.9)
50,000 - 100,000	6	(20.7)	3	(18.8)	9	(20.0)
over 100,000	8	(27.6)	2	(12.5)	10	(22.2)
TOTALS	29	(100.0)	16	(100.0)	45	(100.0)

### SIZE OF PROGRAMS, 1966-67 SCHOOL YEAR

The 45 programs ranged in size from one which admitted only one class with 16 enrollees, to one which admitted six classes with a total of 425 enrollees. These two programs were both located in Illinois. In general, however, Iowa programs were smaller than those in Illinois. The largest program in Iowa admitted only one class which had 73 enrollees.

### NUMBER OF CLASSES ENROLLED, 1966-67 SCHOOL YEAR

Among the 45 programs, the number of classes admitted ranged from one to six, and totaled 75. However, over one-half of the programs admitted only one class during this time period. Thirty five per cent of the Illinois programs enrolled one class, 55% enrolled two and 10% enrolled three or more. In Iowa, 14 (88%) of the 16 programs enrolled only one class; the remaining two (12%) enrolled two classes. See Table 3.5.

Table 3.5

NUMBER OF CLASSES ADMITTED BY PROGRAMS  
DURING 1966-67 SCHOOL YEAR

Number Classes	Illinois		Iowa		Combined	
	N	%	N	%	N	%
One	10	(34.5)	14	(87.5)	24	(53.3)
Two	16	(55.2)	2	(12.5)	18	(40.0)
Three to Six	3	(10.3)			3	( 6.7)
TOTALS	29	(100.0)	16	(100.0)	45	(100.0)

TOTAL ENROLLMENTS, 1966-67 SCHOOL YEAR

Among the 45 programs, a total of 2,468 students were enrolled in 75 classes. In Illinois, in addition to the before-mentioned program which admitted 425 students in six classes, three additional programs each had a total enrollment of over 100. Over 34% of the Illinois programs enrolled more than 50 students each. Over 81% of the Iowa programs each enrolled 50 or fewer students; more than 31% enrolled 20 or fewer. See Table 3.6.

Table 3.6

STUDENT ENROLLMENT IN PROGRAMS  
DURING 1966-67 SCHOOL YEAR

Total Enrollment	Illinois		Iowa		Combined	
	N	%	N	%	N	%
20 or less	4	(13.8)	5	(31.3)	9	(20.0)
21 - 35	6	(20.7)	4	(25.0)	10	(22.2)
36 - 50	9	(31.0)	4	(25.0)	13	(28.9)
51 - 75	5	(17.2)	2	(12.5)	7	(15.6)
76 - 100	1	( 3.5)	1	( 6.3)	2	( 4.4)
102	1	( 3.5)			1	( 2.2)
104	1	( 3.5)			1	( 2.2)
281	1	( 3.5)			1	( 2.2)
425	1	( 3.5)			1	( 2.2)
TOTALS	29	(100.2)	16	(100.1)	45	(99.9)

## DESIGNATION OF CRITERION CLASS FOR STUDY

For purposes of this project, only one class admitted to a program during the 1966-67 school year was studied in detail and is referred to as the criterion class of that program.

To facilitate comparisons, the criterion class was designated to be the class admitted to a program in the fall or the winter of the 1966-67 school year, depending upon the scheduled admission date. Over three-fourths (35) of the classes had started by the end of September. Of the remaining 10 classes, the latest starting date was January 9, 1967.

## CRITERION CLASS SIZE

The 45 criterion classes had a total enrollment of 1,350 students, representing 54.7% of the total 1966-67 enrollments of the programs. The number of students in a criterion class ranged from 13 to 70. The median size of the 16 Iowa criterion classes was 29; and of the 29 Illinois criterion classes, 27. Although Iowa's median class size was the larger, 31% of the Iowa classes enrolled 20 or fewer students. This was true of only 17% of the Illinois programs. Well over two-thirds of the classes in each State enrolled 35 or fewer students. The range in criterion class sizes was greater among publicly administered programs than among private programs. See Table 3.7.

Table 3.7

### SIZE OF CRITERION CLASS BY ADMINISTRATIVE CONTROL

Class Size	Illinois				Iowa				Combined	
	Private		Public		Private		Public		N	%
	N	%	N	%	N	%	N	%		
15 or fewer			1	( 3.9)					1	( 2.2)
16 - 20	1	(33.3)	3	(11.5)			5	(38.5)	9	(20.0)
21 - 25	1	(33.3)	7	(26.9)	1	(33.3)	1	( 7.7)	10	(22.2)
26 - 30	1	(33.3)	6	(23.1)			2	(15.4)	9	(20.0)
31 - 35			3	(11.5)	1	(33.3)	1	( 7.7)	5	(11.1)
36 - 45			2	( 7.7)	1	(33.3)	3	(23.1)	6	(13.3)
46 - 50			2	( 7.7)					2	( 4.4)
51 - 55			1	( 3.9)					1	( 2.2)
61			1	( 3.9)					1	( 2.2)
70							1	( 7.7)	1*	( 2.2)
TOTALS	3	(99.9)	26	(100.1)	3	(99.9)	13	(100.1)	45	(99.8)

\*Although 73 were enrolled in this program, three enrollees chose not to participate in this study and are not included in the data analysis.

A detailed report of the findings on applicants, enrollees, and drop-outs among the 45 criterion classes can be found in Part III of the final report entitled Background Characteristics and Success of Practical Nursing Applicants, Students and Graduates.

#### CRITERION CLASS FACULTY

Several staff utilization patterns were reflected among the 45 programs. These patterns varied from the small program employing two faculty members, responsible for both classroom and clinical instruction and for supervision of all students in the criterion class, to the larger program employing some faculty who taught only in the classroom, while others were responsible only for clinical instruction and supervision of students. For purposes of this Chapter, size of faculty is based on the number of full- and part-time instructors who had direct contact with the criterion class, either in the classroom setting or in clinical areas.

To provide a more meaningful index, faculty size statistics have been converted to full time equivalence (FTE). The smallest number of instructors employed for the criterion class of a program was two. Three programs in Iowa each had two full-time equivalent instructors, while three was the fewest number employed by an Illinois program. The maximum number of FTE faculty for any one criterion class in Illinois was 12; in Iowa, 6.25. See Table 3.8.

Table 3.8  
SIZE BY FTE, OF CRITERION CLASS FACULTY

# of FTE Faculty	Illinois		Iowa		Combined	
	N	%	N	%	N	%
2 - 2.4			4	(25.0)	4	( 8.9)
2.5 - 3.4	3	(10.3)	5	(31.3)	8	(17.8)
3.5 - 4.4	4	(13.8)	3	(18.8)	7	(15.6)
4.5 - 5.4	12	(41.4)	3	(18.8)	15	(33.3)
5.5 - 6.4	4	(13.8)	1	( 6.3)	5	(11.1)
6.5 - 7.4	3	(10.3)			3	( 6.7)
9	1	( 3.4)			1	( 2.2)
10	1	( 3.4)			1	( 2.2)
12	1	( 3.4)			1	( 2.2)
TOTALS	29	(99.8)	16	(100.2)	45	(100.0)

The median number of full-time equivalent instructors for the 45 criterion classes was 4.5. Among the two States, however, there was an obvious difference in the size of criterion class faculties. Seventy-six per cent of the Illinois classes had the median or greater than the combined median number of FTE instructors, while 75% of the Iowa classes had fewer than the combined median number. This is an interesting comparison since the median size of the Illinois criterion classes was smaller than for Iowa.



This indicates that practical nursing programs in Illinois utilized more staff time per student than did programs in Iowa. This is further substantiated when comparing mean faculty FTE to criterion class size. The mean number of FTE faculty members in the Illinois programs increased commensurate with the increase in criterion class size. This was not true in the Iowa programs. See Table 3.9.

Table 3.9

MEAN FACULTY FTE FOR  
CRITERION CLASSES BY CLASS SIZE

Class Size	Illinois		Iowa		Combined	
	# of Criterion Class	Mean FTE	# of Criterion Class	Mean FTE	# of Criterion Class	Mean FTE
11-20	5	4.2	5	2.3	10	3.2
21-30	15	4.7	4	2.8	19	4.3
31-40	4	5.5	5	4.2	9	4.8
41-50	3	8.5	1	3.5	4	7.3
51-60	1	9.0			1	9.0
61-70	1	10.0	1	6.3	2	8.1
TOTALS	29	5.5	16	3.3	45	4.7

STUDENT-FACULTY RATIO

A student-faculty ratio was calculated by dividing the number of students in each criterion class by the number of FTE faculty members who devoted time to that class.

The over-all student-faculty ratio for the 45 criterion classes was 6.4:1. The over-all ratio for Illinois was 5.5:1 and for Iowa 9.2:1. The lowest ratio among programs in Iowa, 6.7:1, was above the over-all ratio for the total 45 programs, while 77% of the Illinois criterion classes had ratios smaller than the over-all. The highest ratio for any one criterion class in Illinois was eight students per faculty member; in Iowa, 12.6 students per faculty member.

The discrepancy in student-faculty ratios among the two States may reflect a basic difference in philosophy regarding staffing. In fact, it is likely that a difference in staffing patterns actually does exist between the two States as reflected in Table 3.10. In addition, exact FTEs are difficult to determine for programs having multiple classes per year and/or utilizing multiple locations for clinical areas. Too, students from more than one class may be in one specific clinical area where faculty supervision is shared across all students and not concentrated on criterion class students only.

Among the 45 criterion classes, the 29 in Illinois show less fluctuation in mean student-faculty ratios by size of criterion classes

than do the 16 in Iowa. Excluding the one criterion class of size 51-60, in general the mean ratio was slightly increased with each progressively larger category of class size. See Table 3.11.

Table 3.10

CRITERION CLASS STUDENT-FACULTY RATIOS

Students/One Instructor	Illinois		Iowa		Combined	
	N	%	N	%	N	%
3.4 or less	1	( 3.5)			1	( 2.2)
3.5 - 4.4	5	(17.2)			5	(11.1)
4.5 - 5.4	9	(31.0)			9	(20.0)
5.5 - 6.4	8	(27.6)			8	(17.8)
6.5 - 7.4	2	( 6.9)	2	(12.5)	4	( 8.9)
7.5 - 8.4	4	(13.8)	5	(31.2)	9	(20.0)
8.5 - 9.4			3	(18.8)	3	( 6.7)
9.5 - 10.4			1	( 6.3)	1	( 2.2)
10.5 and over			5	(31.3)	5	(11.1)
TOTALS	29	(100.0)	16	(100.1)	45	(100.0)

Table 3.11

MEAN STUDENT-FACULTY RATIOS BY  
SIZE OF CRITERION CLASS

Size of Criterion Class	Illinois		Iowa		Combined	
	# Crit. Classes	Mean Ratio	# Crit. Classes	Mean Ratio	# Crit. Classes	Mean Ratio
11 - 20	5	4.5:1	5	8.1:1	10	6.3:1
21 - 30	15	5.6:1	4	9.6:1	19	6.4:1
31 - 40	4	6.2:1	5	8.8:1	9	7.7:1
41 - 50	3	6.0:1	1	12.5:1	4	7.6:1
51 - 60	1	5.8:1			1	5.8:1
61 - 70	1	6.1:1	1	11.2:1	2	8.7:1
TOTALS	29	5.5:1	16	9.2:1	45	6.8:1

Table 3.12 dispels any speculation that the mean student-faculty ratios were markedly influenced by the source(s) of funds for faculty salaries. Since funds for faculty salaries in Iowa came from only two sources, figures combining the mean ratios of the two States would be misleading and are therefore omitted.



Table 3.12

STUDENT-FACULTY MEAN RATIOS BY  
SOURCE OF FUNDS FOR FACULTY SALARIES

	Illinois		Iowa	
	# Crit. Classes	Mean Ratio	# Crit. Classes	Mean Ratio
Public School Only	8	5.6:1	13	9.4:1
Private Parochial Hospital	3	6.3:1	3	8.4:1
Pub. Sch. & Coop. Ser. Agency	8	5.1:1		
MDTA Only	7	5.6:1		
Public School & MDTA	2	4.1:1		
County	1	6.1:1		
TOTALS	29	5.5:1	16	9.2:1

STUDENTS IN CRITERION CLASSES

The reader is reminded that the analyses of the 1350 students comprising the 45 criterion classes are reported in detail in Part III of the four-part final report.

## CHAPTER 4

### FACULTY

Data reported in this chapter were gathered from the historical information forms completed by each coordinator, and through personal interviews with coordinators and instructors of all programs. Copies of instruments used are in Appendix A.

Information was obtained on all full- and part-time faculty members employed in the 45 programs between July 1, 1961 and the end of the criterion class year, 1966-67. All faculty members employed within this period were placed in one of three categories: 1) those employed by a program who terminated employment prior to the criterion class year; 2) those employed by a program during the criterion class year but with no teaching or supervisory responsibilities with the criterion class; and 3) those who did have teaching and/or supervisory responsibilities with the criterion class. Nursing service personnel serving as clinical instructors were included as faculty members of a program.

A total of 590 full- and part-time faculty members were employed during the six year period. This total comprised 272 who had no contact with the criterion classes and 318 who did. The former group will be discussed in Section 1 of this Chapter, the latter in Section 2.

#### SECTION 1: FACULTY MEMBERS HAVING NO CONTACT WITH CRITERION CLASS

Of the 272 faculty members employed in the 45 programs during the six year period but who had no contact with the criterion class, 254 had terminated their employment prior to the time the criterion class was admitted; and 18 were employed in a program during the criterion class year (1966-67) but had no contact with a criterion class. For these 272, data were collected regarding their highest level of education achieved, degree majors (for those holding degrees) and the length of time each was employed.

#### HIGHEST EDUCATIONAL LEVEL ACHIEVED AND DEGREE MAJORS

Table 4.1 shows educational achievement known for 240 of the 254 who terminated employment prior to the criterion class year.

Among the 18 employed in a program during the criterion class year (1966-67) but who had no contact with a criterion class, 13 held a bachelor of science degree in nursing. The educational level of the remaining five is unknown.

Between the two States, Illinois had the smaller percentage of diploma registered nurses and the larger percentage of baccalaureate and masters prepared personnel whose degrees were in the field of nursing. Also, Illinois had the higher percentage prepared in fields other than nursing. Combining the two States, of the 231 registered nurses for whom this information is known, 96 (40%) were diploma nurses; 113 (47%) held a bachelor's degree, 87 (36%) in nursing and 26 (11%) in another field; and 22 (9%) held

a master's degree, seven (3%) in nursing and 15 (6%) in another field. Among the 41 registered nurses with baccalaureate or masters degrees in fields other than nursing, their degree majors were obtained in fields such as education, science, and guidance and counseling. In Table 4.1, the category of "other" includes non-nurses who were nutritionists, first-aid instructors, social workers, reading instructors, etc. These faculty members, nine in number, constituted four per cent of the 240 for whom fields of preparation were known.

Table 4.1

EDUCATIONAL LEVEL OF FACULTY MEMBERS EMPLOYED SINCE  
JULY 1, 1961 AND TERMINATED PRIOR TO ADMISSION OF CRITERION CLASS

Educational Level	Illinois		Iowa		Combined	
	N	%	N	%	N	%
R.N. (Diploma)	67	(36.8)	29	(50.0)	96	(40.0)
R.N. (B.S.N.)	75	(41.2)	12	(20.7)	87	(36.3)
R.N. (Bacc. other than in nursing)	14	( 7.7)	12	(20.7)	26	(10.8)
R.N. (M.S.N.)	7	( 3.8)	-	-	7	( 3.0)
R.N. (Masters other than in nursing)	11	( 6.0)	4	( 6.9)	15	( 6.2)
Other	8	( 4.4)	1	( 1.7)	9	( 3.8)
TOTALS	182	(99.9)	58	(100.0)	240*	(100.1)

\* Unknown for 14

EMPLOYMENT STABILITY

It is difficult to establish a clear picture of faculty-turnover primarily because of the varying lengths of time programs have been in operation. In an attempt to determine the employment stability of those who had no contact with the criterion class, data were sorted by the number of years a program had been in operation. This was done to establish a criterion with which to compare lengths of employment in order to obtain a reasonable index of employment stability. Without such a control, the number of years a faculty member had been employed would have been a meaningless reference.

Among the 18 employed in a program during the year the programs were studied (1966-67) but who had no contact with the criterion class, 17 had been employed only one year as of June 30, 1966. Length of employment was unknown for one.

Table 4.2 compares the length of employment of the 254 (those who had terminated their employment prior to the criterion year) with the number of years their respective programs had been in operation. For a meaningful index, each category denoting the number of years of operation must be considered separately. For example, among the four Illinois programs in operation for nine years, a total of 41 were employed during the five years immediately preceding the criterion year; 18 (43.9%) of these for a total length of only one year and another four (10%) for only two years. Only one of the 41 had been employed the full nine years. Similarly, among the two Iowa programs in operation for nine years, six instructors had terminated their employment prior to the criterion year. Of these, three (50%) had been employed for only one year, one (17%) for two years, and no one for a greater length than five years.

For the 29 Illinois programs, the mean number of years of operation was 7.0 while the mean number of years of employment for the 196 who terminated their employment from these programs prior to the criterion year was 2.2. For the 16 Iowa programs, the mean number of years of operation was 6.9 and the mean length of employment for the like group of faculty was 2.0.

## SECTION 2: FACULTY MEMBERS HAVING CONTACT WITH CRITERION CLASS

### NUMBER

In this sub-part of Section 2, full-time equivalency for faculty members is based on the amount of time devoted to the criterion class; not on the amount of time employed for the overall operations of a program.

A total of 318 full- and part-time faculty members had contact with the 1350 students in 45 criterion classes; 242 in the 29 Illinois classes, and 76 in the 16 Iowa classes. A faculty member was considered to be full-time if assigned to the criterion class 100% of the time for at least 10 months of the total length of the instructional program. All others were considered to be part-time.

Of the 242 in Illinois, 118 (48.8%) were full-time and 124 (51.2%) were part-time. Of the 76 in Iowa, 42 (55.3%) were full-time and 34 (44.7%) were part-time. These percentages likely reflect situations where faculty members were employed full-time in programs admitting more than one class during the year, but devoting only part-time to each class. The areas of responsibility of each faculty member, and the percentage of time she devoted to each, is reported in detail in Chapter 6. The number of faculty members per criterion class in Illinois ranged from no full-time and 25 part-time, to 10 full-time and seven part-time. In Iowa, this range was from one full-time and two part-time, to four full-time and six part-time. Only two of the 45 criterion classes, one in each State, had no part-time faculty.

Table 4.2

NUMBER OF YEARS EMPLOYED IN A PROGRAM FOR THOSE TERMINATING PRIOR TO  
THE CRITERION CLASS YEAR, BY THE NUMBER OF YEARS  
THE PROGRAM HAD BEEN IN OPERATION

# Yrs. Prog. in Operation Prior to Criterion Class Year	No. Prog.	Length of Employment											Total Number Fac- ulty %	
		10 or More Years												
		1 Year	2 Years	3 Years	4 Years	5 Years	1-9 Years	%	N	%	N	%		
		N	%	N	%	N	%	N	%	N	%	N	%	
Illinois:														
1	1	7	(100.0)											7 (100.0)
2	1	4	(100.0)											4 (100.0)
3	8	11	( 47.8)	10	(43.5)	2 ( 8.7)								23 (100.0)
5	3	6	( 37.5)	5	(31.3)	2 ( 12.5)	2	(12.5)	1	( 6.3)				16 (100.1)
6	1	2	( 25.0)	5	(62.5)		1	(12.5)						8 (100.0)
7	1	2	( 33.3)	2	(33.3)	1 ( 16.7)			1	(16.7)				6 (100.0)
8	1					1 (100.0)								1 (100.0)
9	4	18	( 43.9)	4	( 9.8)	7 ( 22.2)	4	( 9.8)	7	(17.1)	1	(2.4)		41 (100.1)
10	2	5	( 55.6)	1	(11.1)	2 ( 22.2)	1	(11.1)						9 (100.0)
12	1	3	( 30.0)	4	(40.0)	3 ( 30.0)								10 (100.0)
13	2	5	( 62.5)	2	(25.0)		1	(12.5)						8 (100.0)
14	2	5	( 29.4)	4	(23.5)	3 ( 17.7)	2	(11.8)	1	( 5.9)	1	(5.9)	1	17 (100.1)
18	1	13	( 28.3)	18	(39.1)	5 ( 10.9)	4	( 8.7)	6	(13.0)				46 (100.0)
	28	81	( 41.3)	55	(28.1)	26 ( 13.3)	15	( 7.6)	16	( 8.2)	2	(1.0)	1	196 (100.0)



Table 4.2  
(Continued)

# Yrs. Prog. in Operation Prior to Criterion Class Year	No. Prog.	Length of Employment										Total Number Fac- ulty	
		10 or More											
		1 Year	2 Years	3 Years	4 Years	5 Years	1-9 Years	Years	%	N	%		
		N	%	N	%	N	%	N	%	N	%	N	%
Iowa:													
1	1	1	(100.0)									1	(100.0)
2	1	1	( 50.0)	1	(50.0)							2	(100.0)
3	1	3	(100.0)									3	(100.0)
4	3	4	( 50.0)	2	(25.0)	1	(12.5)	1	(12.5)			8	(100.0)
6	1	4	( 50.0)	2	(25.0)	2	(25.0)					8	(100.0)
8	1	2	( 40.0)	1	(20.0)	1	(20.0)			1	(20.0)	5	(100.0)
9	2	3	( 50.0)	1	(16.7)	1	(16.7)			1	(16.7)	6	(100.1)
11	1	2	( 33.3)	2	(33.3)	2	(33.3)					6	( 99.9)
13	1	2	( 50.0)					1	(25.0)	1	(25.0)	4	(100.0)
14	1	5	( 50.0)	3	(30.0)	1	(10.0)	1	(10.0)			10	(100.0)
18	1	1	( 20.0)	1	(20.0)	2	(40.0)	1	(20.0)			5	(100.0)
	14	28	( 48.3)	13	(22.4)	10	(17.2)	4	( 6.9)	3	( 5.2)	58	(100.0)

Based on full-time equivalency (FTE), the total number of faculty employed was 210.75; 157.50 in Illinois and 53.25 in Iowa. The number of FTE faculty, by criterion class, was shown in Chapter 3, Table 3.8.

### Selected Characteristics

#### SEX

All 268 for whom this information is known were women.

#### RACE

Of the 260 responding to this item, 246 (94.6%) were caucasian and 14 (5.4%), non-caucasian. The 14 non-caucasians were black, oriental, indian, Puerto Rican or Mexican.

#### AGE, MARITAL STATUS, EMPLOYMENT STATUS AND TYPE OF ASSIGNMENT; AND COMPARISONS AMONG THESE CHARACTERISTICS

It is important to note that in this sub-part, as opposed to the first sub-part of Section 2, the determination of employment status is based on the amount of time devoted to the overall operations of a program; not to the time devoted solely to the criterion class. Here, full-time is considered to be 100% employment in the program for 10 months or more of a calendar year; part-time is considered to be employment for any length of time during the year, but at less than 100% of the time; and, part-year is for 100% of the time for any period short of 10 months.

The types of assignment were categorized according to area(s) in which faculty members had administrative and/or teaching responsibilities: (1) administration and/or classroom teaching area only, (2) teaching in clinical area only, and (3) involvement in both areas.

For comparison purposes, data on age, marital status, employment status and type of assignment are reported in Table 4.3.

Employment status is known for 310 of the 318 faculty members. Of the 310, 184 (59%) were full-time, 47 (15%) were part-time and 79 (26%) were part-year. See Table 4.4.

Relative to type of assignment: of the 184 full-time faculty members, 32 (17%) had responsibility for administration and/or classroom teaching only, seven (4%) for clinical supervision only, and 145 (79%) for both; of the part-time faculty members, 16 (34%) assigned to administration and/or classroom teaching only, nine (19%) to clinical area only, and 22 (47%) to both; and of the part-year faculty members, eight (10%) had administrative and/or classroom teaching responsibilities only, four (5%) had clinical area responsibilities only, and 67 (85%) had responsibilities in both areas. See Table 4.4.

Table 4.3

## EMPLOYMENT STATUS, ASSIGNMENT, AGE AND MARITAL STATUS OF FACULTY MEMBERS

Age	Marital* Status	Full-Time Assignment**			Part-Time Assignment**			Part-Year Assignment**					Unknown Assignment** Class Both	Totals
		Clinical Only	Adm./ Class	Both	Clinical Only	Adm./ Class	Both	Clinical Only	Class/Adm. 1-5 6-9 1-5 6-9 1-5 6-9	Both 1-5 6-9	Both 1-5 6-9	Both 1-5 6-9		
20-24	M S H	1	1	2 2				1			1			6 2
25-29	M S H U			19 2				2	1		4 3 3	1	1	28 12 1
30-34	M S H U	1	2 1 1	15 10 3		2	4 1	1			3 4 1		2	29 17 5 1
35-39	M S H	1	1 1 1	13 3 1		1	2 2		1	2	2 1		1	22 8 2
40-44	M S H		2 1	13 4 3		2	2 1	1	1	2	2			27 6 4
45-49	M S H	2	5 2 2	14 3 3		1		1		2	1 1	1	1	26 7 5
50-54	M S H		3	14 3 1					1	1	1 1			21 4 2
55 and over	M S H		1 3 1	5 2 3		2				2	3			13 5 6
Unknown	U	2	5	7		6	8	7	1	15	5		1	59
TOTALS		7	32	145		9	16	22	4	4	40	27	1	318

\*M = Married; S = Single, religious; H = Head of Household; U = Unknown.

\*\*Based on administration and/or classroom only versus clinical supervision only.

Table 4.4

## ASSIGNMENT BY EMPLOYMENT STATUS

	Full-Time		Part-Time		Part-Year		Total	
	N	%	N	%	N	%	N	%
Class and/or Administration Only	32	(17.4)	16	(34.1)	8	(10.1)	56	(18.1)
Clinical Only	7	( 3.8)	9	(19.1)	4	( 5.1)	20	( 6.5)
Both	145	(78.8)	22	(46.8)	67	(100.0)	234	(75.5)
TOTALS	184	(59.0)	47	(15.0)	79	(26.0)	310*	(100.0)

\*Unknown for 8

Comparing the full-time, part-time and part-year groups on the basis of assignment, the full-time and part-year groups had a far higher percentage assigned to both areas; 79% of the full-time group and 85% of the part-year group. This was less true of the part-time category; 47% were assigned to both areas while 19% were assigned to the clinical area only and 34% to administration and/or classroom teaching only.

The age of each faculty member was calculated by subtracting the year of birth from the year 1967. Ages, known for 259 of the 318 faculty members, ranged from 22 to 71 years. Among age-range categories, the category of ages 30-34 had the greatest number, 52 (20.4%); 186 (71.9%) were between 30 and 54 years old. Only eight (3%) were under age 25 and four (1.5%) were over age 65.

Age characteristics for the three groups (full-time, part-time and part-year) are shown in Table 4.5. The median ages for the three groups are 40.1 years, 38 years and 34.5 years respectively. The mean ages are 40.7 years, 40 years, and 37.8 years respectively. A comparison of the mean and the median within each category indicates a near-normal distribution of ages in the full-time group. Like comparisons for the part-time and part-year groups indicate the mode, or greater number of individuals, fall in the lower age ranges; the mean ages are raised by the few in each group at relatively higher ages.

Table 4.5

## AGE CHARACTERISTICS OF FACULTY MEMBERS

	Full-Time	Part-Time	Part-Year
Median Age	40.1 years	38.0 years	34.5 years
Mean Age	40.7 years	40.0 years	37.8 years
Under 40 years	47.6%	53.8%	60.3%
Under 45 years	60.6%	80.7%	72.1%

From the standpoint of family involvement, if the child-bearing years are considered to be under age 40, then 48% of the full-time, 54% of the part-time and 60% of the part-year faculty would fall in this category. If the child bearing years were established at under age 45, the percentages would be 61%, 81% and 72% respectively.

Regarding marital status, of the 257 reporting this information, 172 (67%) were married; 61 (24%) were single, (including eight in religious orders); and 24 (9%) were widowed, separated, or divorced; the latter group was categorized as "head of household."

The married group represents 67% of the full-time faculty members, 77% of the part-time, and 54% of the part-year faculty. The single group (including eight members of religious orders) consisted of 22% of the full-time faculty, 15% of the part-time and 36% of the part-year group. The head-of-household category, (widowed, separated, or divorced) included 10% of the full-time, 8% of the part-time and 9% of the part-year faculty. Marital status for one full-time and one part-year faculty member was unknown.

A comparison between employment status, age and marital status indicates that the part-time group tends to be young, with a greater percentage married and in the child-bearing and child-rearing years. Therefore, it appears that registered nurses who are young mothers are a source for qualified faculty members but most likely on a part-time basis.

Among the three groups (full-time, part-time and part-year), the part-year group is the youngest and more of them are single. While those in this group were not employed 10 months during the criterion class year, they were employed 100% for a shorter period of time. Since 73% of this group were in employment late in the criterion class year, it is reasonable to expect that some were newly-employed, full-time faculty members who would continue full-time in the year ahead. This indicates a likelihood that many in this part-year group were recently graduated from a program in professional nursing and had fewer years of employment experience. If this is so, the implications for in-service teacher-education are great.

The full-time group contains a greater percentage of women who are beyond the child-bearing and child-rearing years, and over three-fourths of them are married or heads-of-households. This could reflect the practice of women seeking full-time employment when their children are out of infancy or childhood, and/or when they are the sole breadwinner for a family. Therefore, registered nurses with these characteristics are likely to be a promising source of full-time faculty members.



## NUMBER OF CHILDREN

Of the total 318, this information is known for 256. The largest group, 98 (38%), had no children. This group included the single, and the religious personnel as well as some married members. The next largest group, 53 (20.7%), had two children each. The remaining groups, in order by size, had three, one, four, five, seven and eight children respectively. Two had eight or more children. See Table 4.6.

Table 4.6

### NUMBER OF CHILDREN

Number	Illinois		Iowa		Combined	
	N	%	N	%	N	%
None	81	(42.6)	17	(25.8)	98	(38.3)
One	19	(10.0)	18	(27.3)	37	(14.5)
Two	40	(21.1)	13	(19.7)	53	(20.7)
Three	30	(15.8)	10	(15.2)	40	(15.6)
Four	11	( 5.8)	4	( 6.1)	15	( 5.9)
Five	3	( 1.6)	4	( 6.1)	7	( 2.7)
Seven	4	( 2.1)			4	( 1.6)
Eight or More	2	( 1.1)			2	( .8)
TOTALS	190	(100.1)	66	(100.2)	256*	(100.1)

\*Unknown for 62.

## EDUCATIONAL LEVEL OF FATHERS

Among the 244 fathers for whom educational level is known, 40 (16.4%) had less than an eighth grade education, 64 (26%) had achieved an eighth grade education, 36 (14.8%) had some high school while 55 (22.5%) had graduated from high school and had no further education. Twenty per cent of the fathers had college experience, half of them graduated or went beyond four years. Six (2.5%) had achieved at the doctoral level. See Table 4.7.

## EDUCATIONAL LEVEL OF MOTHERS

Eight per cent of the 250 mothers for whom this information is known had less than an eighth grade education; 23% achieved a maximum of eighth grade. Fifteen per cent had some high school while 30% were high school graduates. More mothers completed high school than did fathers.

Considering education beyond high school, nearly 24% of the mothers entered college; slightly more than seven per cent were college graduates. Nine per cent of the fathers reached this level. Among mothers, no one completed a degree beyond the baccalaureate. See Table 4.8.

Table 4.7

## HIGHEST EDUCATIONAL LEVEL ACHIEVED BY FATHERS

Level	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Less than 8th grade	35	(19.4)	5	( 7.8)	40	(16.4)
8th grade	44	(24.4)	20	(31.3)	64	(26.2)
Some High School	23	(12.8)	13	(20.3)	36	(14.8)
H.S. graduate	40	(22.2)	15	(23.4)	55	(22.5)
Some college	21	(11.7)	4	( 6.3)	25	(10.2)
College graduate	10	( 5.6)	4	( 6.3)	14	( 5.7)
Masters + hours	2	( 1.1)	2	( 3.1)	4	( 1.6)
Doctorate	5	( 2.8)	1	( 1.6)	6	( 2.5)
TOTALS	180		74		244*	

\*Unknown for 74

Table 4.8

## HIGHEST EDUCATIONAL LEVEL ACHIEVED BY MOTHERS

Level	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Less than 8th grade	18	( 9.7)	3	( 4.7)	21	( 8.4)
8th grade	42	(22.6)	15	(23.4)	57	(22.8)
Some High School	28	(15.1)	10	(15.6)	38	(15.2)
H.S. graduate	57	(30.6)	18	(28.1)	75	(30.0)
Some college	27	(14.5)	14	(21.9)	41	(16.4)
College graduate	14	( 7.5)	4	( 6.3)	18	( 7.2)
TOTALS	186	(100.0)	64	(100.0)	250*	(100.0)

\*Unknown for 68

## OCCUPATIONS OF FATHERS

Among the 249 who reported this information, nine (3.6%) fathers were not employed. It seems logical to assume that at least some of these nine were deceased. Seventy-six (31%) were employed in professional or semi-professional positions, 68 (27%) in non-farm technical or skilled positions, and 32 (13%) in non-farm semi-skilled or unskilled positions. Forty (16%) were farm owner-operators while 24 (9.6%) were employed on farms they did not own. See Table 4.9.

Table 4.9

## OCCUPATIONS OF FATHERS

Level of Occupation	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Unemployed	3	( 1.6)	6	( 9.1)	9	( 3.6)
Professional	26	(14.2)	4	( 6.1)	30	(12.1)
Semi-Professional	34	(18.6)	12	(18.2)	46	(18.5)
Technical	5	( 2.7)			5	( 2.0)
Skilled (non-farm)	45	(24.6)	18	(27.3)	63	(25.3)
Semi-skilled (non-farm)	14	( 7.7)	2	( 3.0)	16	( 6.4)
Unskilled (non-farm)	13	( 7.1)	3	( 4.5)	16	( 6.4)
Farm owner	25	(13.7)	15	(22.7)	40	(16.1)
Farm, other	18	( 9.8)	6	( 9.1)	24	( 9.6)
TOTALS	183	(100.0)	66	(99.9)	249*	(100.0)

\*Unknown for 69.

## OCCUPATIONS OF MOTHERS

Slightly more than 25% of the 254 mothers were reported to be employed outside the home at the time of the study; the remainder were reported as housewives. Among the 70 working outside the home, 18 (25.7%) were in professional or semi-professional occupations and five (7.1%) in technical occupations. Twenty (28.6%) were in skilled non-farm occupations; 10 (14.3%) in semi-skilled, and 14 (20.0%) in unskilled, non-farm occupations. Two (2.9%) were in domestic occupations and one mother was reported as a farm owner-operator. See Table 4.10.

## SIZE OF TOWN OF HIGH SCHOOL GRADUATION

The largest group, 77 (30%) of the 260 reporting, indicated they graduated from a high school in a town of less than 2500 population. The next largest group, 66 (25%), graduated from high school in communities with a population of 100,000 or over. The size of towns for the remaining 45% ranged from 2500 to 99,000 populations, with a fairly even distribution of members in each of these categories of size as shown in Table 4.11.

## HIGHEST EDUCATIONAL LEVEL OF SPOUSES

This information was unknown or inappropriate for 136 of the 318 faculty members. Of the remaining (182) number of faculty members, over one-quarter, 50 (28%) of their spouses had achieved some college and another one-quarter, 46 (25%) were college graduates. Twenty (11%) held a master's degree and 13 (7%) a doctorate. Fifteen (8%) achieved less

than high school graduation, five of these having completed only eight grades. No spouse had achieved less than an eighth grade education.

Table 4.10

OCCUPATIONS OF MOTHERS

Level of Occupation	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Housewife	135	(71.1)	49	(76.6)	184	(72.4)
Professional	4	( 2.1)	2	( 3.1)	6	( 2.4)
Semi-professional	12	( 6.3)			12	( 4.7)
Technical	3	( 1.6)	2	( 3.1)	5	( 2.0)
Skilled (non-farm)	13	( 6.8)	7	(10.9)	20	( 7.9)
Semi-skilled (Non-farm)	10	( 5.3)			10	( 3.9)
Unskilled (non-farm)	12	( 6.3)	2	( 3.1)	14	( 5.5)
Domestic	1	( .5)	1	( 1.6)	2	( .8)
Farm owner			1	( 1.6)	1	( .4)
TOTALS	190	(100.0)	64	(99.9)	254*	(100.0)

\*Unknown for 64

Table 4.11

SIZE OF TOWN OF HIGH SCHOOL GRADUATION

Size of Town	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Less than 2500	56	(28.9)	21	(38.8)	77	(29.6)
2,500-4,999	14	( 7.2)	12	(18.2)	26	(10.0)
5,000-19,999	17	( 8.8)	13	(19.7)	30	(11.5)
20,000-49,999	25	(12.9)	12	(18.2)	37	(14.2)
50,000-99,999	19	( 9.8)	5	( 7.6)	24	( 9.2)
100,000 and over	63	(32.5)	3	( 4.5)	66	(25.4)
TOTALS	194	(100.1)	66	(100.0)	260*	(99.9)

\*Unknown for 58

A comparison of the highest achieved educational level of faculty members and their spouses with that of fathers and mothers reflects the trend for young adults to have achieved more education than the preceding generation.

Table 4.12

## HIGHEST EDUCATIONAL LEVEL OF SPOUSES

	Illinois		Iowa		Combined	
	N	%	N	%	N	%
8th grade	3	( 2.4)	2	( 3.6)	5	( 2.8)
Some high school	8	( 6.3)	2	( 3.6)	10	( 5.5)
H.S. graduate	21	(16.5)	17	(30.9)	38	(20.9)
Some college	33	(26.0)	17	(30.9)	50	(27.5)
College graduate	37	(29.1)	9	(16.4)	46	(25.3)
Master's degree	8	( 6.3)	4	( 7.3)	12	( 6.6)
Master's + hours	7	( 5.5)	1	( 1.8)	8	( 4.4)
Doctorate	10	( 7.9)	3	( 5.5)	13	( 7.1)
TOTALS	127	(100.0)	55	(100.0)	182*	(100.1)

\*Unknown or inappropriate for 136.

## OCCUPATIONS OF SPOUSES

This was inappropriate for several groups; single faculty members, those in a religious order and those among the widowed, separated or divorced category who chose not to respond. Since the number responding "none" approximated very closely those in the above groups, the "none" category was eliminated from this description. Occupational data were available on 180 spouses. Of these, the largest group, 69 (38.3) were professionals. Fifty-five (30.5%) were employed in semi-professional or technical occupations. Illinois had a substantially larger percentage of spouses in the "technical" category than did Iowa, 15% compared to 1.9%; while the opposite was true in the skilled non-farm category, 24.5% compared to 15%. Iowa also had a greater percentage of spouses who were farmers. See Table 4.13.

Table 4.13

## LEVEL OF SPOUSES OCCUPATION

Level of Occupation	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Professional	52	(40.9)	17	(32.1)	69	(38.3)
Semi-professional	26	(20.5)	9	(17.0)	35	(19.4)
Technical	19	(15.0)	1	( 1.9)	20	(11.1)
Skilled (non-farm)	19	(15.0)	13	(24.5)	32	(17.8)
Semi-skilled (non-farm)	7	( 5.5)	1	( 1.9)	8	( 4.4)
Non-skilled (non-farm)	1	( .8)	1	( 1.9)	2	( 1.1)
Farm owner	2	( 1.6)	3	( 5.7)	5	( 2.9)
Farm tenant laborer	1	( .8)	8	(15.1)	9	( 5.0)
TOTALS	127	(100.1)	53	(100.1)	180*	(100.0)

\*Unknown or inappropriate for 138.



## HIGHEST EDUCATIONAL LEVEL ACHIEVED

Of the 315 faculty members reporting this information, 306 (97%) were registered nurses. Fifty-three per cent of these were graduated from a diploma program. Iowa programs employed about 21% proportionately more diploma-prepared RNs than did Illinois.

The preparation of an additional 124 (39%) of the 306 RN faculty members was at the baccalaureate level. Of this group, 91 (73%) had an earned degree in nursing and 33 (27%) in fields other than nursing; such as, education and science.

Twenty-one (7%) of the RNs were prepared at the master's level. Of these 21, two (10%) had their major in nursing; the other 19 (90%) had majors in fields other than nursing.

Nine (3%) of the 315 faculty members reporting this information were non-nurses; they included nutritionists, first aid instructors, a social worker and three reading instructors. All nine were prepared at the baccalaureate level. See Table 4.14.

Table 4.14

### HIGHEST EDUCATIONAL LEVEL ACHIEVED BY CRITERION CLASS FACULTY MEMBERS

Educational Level	Illinois		Iowa		Combined	
	N	%	N	%	N	%
RN-Diploma	110	(46.0)	51	(67.1)	161	(51.1)
RN-BSN	79	(33.1)	12	(15.8)	91	(28.9)
RN-Bacc. in other than nursing	22	( 9.2)	11	(14.5)	33	(10.5)
Non-RN-Bacc.	9	( 3.8)	-	-	9	( 2.9)
RN-MSN	2	( .8)	-	-	2	( .6)
RN-Masters in other than nursing	17	( 7.1)	2	( 2.6)	19	( 6.0)
TOTALS	239	(100.0)	76	(100.0)	315*	(100.0)

\*Unknown for 3.

Not shown in Table 4.14, but evident from the data, is a clear trend for registered nurse faculty members to pursue some type of education beyond their earned diploma or baccalaureate degree. Of the group prepared at the diploma level, 60.0% had achieved at least one course beyond the diploma. The situation was similar among those with baccalaureate degrees; 60% had achieved at least one additional course. While data are not specific for those with a master's degree, it seems reasonable to assume that the same trend holds true to some measure.

Each faculty member was asked to indicate the present status of his personal education pursuits. Of the 260 responding, 182 (70%) were not involved in further educational endeavors at the time of the study. Seventy-eight (30%) of the 260 were pursuing some type of continuing education. See Table 4.15.

Table 4.15

PRESENT WORK-EDUCATION INVOLVEMENT

Work-Education Involvement	Illinois		Iowa		Combined	
	N	%	N	%	N	%
P.T. Work-No School	11	( 5.7)	10	(15.2)	21	( 8.1)
P.T. Work-P.T. School	1	( .5)	-	-	1	( .4)
F.T. Work-No School	121	(62.4)	40	(60.0)	161	(61.9)
F.T. Work-P.T. School	61	(31.4)	16	(24.2)	77	(29.6)
TOTALS	194	(100.0)	66	(100.0)	260*	(100.0)

\*Unknown for 58.

FIELD OF BACCALAUREATE DEGREE MAJOR

A total of 16 fields of major were identified by 152 of the 154 faculty members who reported a minimum of baccalaureate level preparation. Three-fourths of the 152 had majored in nursing; five (3%) in fields directly related to health (health education, pharmacology and dietetics); fifteen (10%) in the social or physical sciences; eleven (7%) in education; and, one each in foreign language, business administration and mathematics. See Table 4.16.

Table 4.16

FIELD OF BACCALAUREATE DEGREE MAJOR

Field of Major	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Nursing (unspec.)	91	(71.1)	15	(62.5)	106	(69.7)
Nursing Education	9	( 7.0)	3	(12.5)	12	( 7.9)
Education (gen.)	6	( 4.7)	2	( 8.3)	8	( 5.3)
Health education	1	( .8)	-	-	1	( .7)
Chemistry	1	( .8)	1	( 4.2)	2	( 1.3)
Liberal Arts	-	-	2	( 8.3)	2	( 1.3)
Science (unspec.)	2	( 1.6)	-	-	2	( 1.3)
Biology	9	( 7.0)	-	-	9	( 5.9)
Pharmacology	1	( .8)	-	-	1	( .7)
Home Economics	-	-	1	( 4.2)	1	( .9)
Dietetics	3	( 2.3)	-	-	3	( 1.7)
Psychology	1	( .8)	-	-	1	( .7)
Sociology	1	( .8)	-	-	1	( .7)
Foreign Language	1	( .8)	-	-	1	( .7)
Business Adm.	1	( .8)	-	-	1	( .7)
Mathematics	1	( .8)	-	-	1	( .7)
TOTALS	128	(100.1)	24	(100.0)	152*	(100.2)

\*Unknown for 2.

## FIELD OF MASTERS DEGREE MAJOR

Twenty-One (7%) of the RN faculty members were prepared at the masters level; seven different fields of major were reported. While three-fourths of the nurses with a baccalaureate degree had majored in nursing, this was true of only 33% of the nurses with a master's degree. The majority, 13 (62%) of the 21 nurses with a master's degree were prepared in the field of education; two of these majored in counseling and guidance, and one in vocational-technical education. One majored in public health. See Table 4.17.

Table 4.17

### FIELD OF MASTERS DEGREE MAJOR

Field of Major	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Nursing Education	3	(15.8)	-	-	3	(14.3)
Public Health	1	( 5.3)	-	-	1	( 4.8)
Nursing Admin.	3	(15.8)	-	-	3	(14.3)
Education (gen.)	9	(47.4)	1	(50.0)	10	(47.6)
Counseling and Guidance	1	( 5.3)	1	(50.0)	2	( 9.5)
Vocational Education	1	( 5.3)	-	-	1	( 4.8)
Admin. of Nsg. Sch.	1	( 5.3)	-	-	1	( 4.8)
TOTALS	19	(100.2)	2	(100.0)	21	(100.1)

## REASONS FOR ACCEPTING PRESENT FACULTY POSITION

Of the 260 faculty members responding to this item, 25% indicated that their decision to accept their current position was influenced by another person(s); another 25% indicated they viewed their position as a personal opportunity; while yet another 25% reported "personal" reasons influenced their decision.

Three per cent reported that a financial need was the motivator; one per cent gave reasons of geographic location, and 12% gave job satisfaction as the reason. These data indicate that income and convenience aspects had little influence on their decision to select a faculty position. Rather, they indicate a greater concern for personal opportunity and growth. See Table 4.18.

## FACULTY SALARIES

Overall, faculty salaries were higher in publicly supported programs than in private programs. During the criterion class year, 1966-67, the minimum salary range for instructors was \$4,000-\$4,500 in all cases except the Illinois private programs where it was \$5,000-\$5,500. However, in both States the maximum range for instructors was \$3,000 higher in the publicly-supported programs than in the private programs.

Table 4.18

## REASONS FOR ACCEPTING PRESENT FACULTY POSITION

Reason	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Influenced by others	55	(28.4)	10	(15.2)	65	(25.0)
Financial need	6	( 3.1)	2	( 3.0)	7	( 2.7)
Personal opportunity	50	(25.8)	16	(24.2)	66	(25.4)
Geographic location	2	( 1.0)	1	( 1.5)	3	( 1.2)
Job satisfaction	23	(11.9)	8	(12.1)	31	(11.9)
Personal	46	(23.7)	21	(31.8)	67	(25.8)
Others	12	( 6.2)	8	(12.1)	20	( 7.7)
TOTALS	194	(100.0)	66	(99.9)	260*	(99.7)

\*Unknown for 58

A similar comparison among coordinators of the programs in both States cannot be made since the coordinators of the Illinois private programs are all of a religious order and apparently received no salary. This was true also in one of the two private parochial programs in Iowa while in the other, the coordinator reported receiving an annual salary. In Iowa, where coordinators' salaries were reported for both private and public programs, the minimum range was \$500 higher and the maximum range was \$2,000 higher in the public programs. See Table 4.19.

Table 4.19

ANNUAL SALARIES OF FULL-TIME  
COORDINATORS AND INSTRUCTORS

	Illinois	Iowa
<u>Public Programs</u>		
Max. range - coordinators	\$11,000-11,500	\$10,500-11,000
Min. range - coordinators	6,000-6,500	6,000-6,500
Max. range - instructors	9,000-9,500	8,000-8,500
Min. range - instructors	4,000-4,500	4,000-4,500
<u>Private Programs</u>		
Max. range - coordinators	(no salaries, all relig.)	8,500-9,000
Min. range - coordinators	" " "	5,500-6,000
Max. range - instructors	6,000-6,500	5,000-5,500
Min. range - instructors	5,000-5,500	4,000-4,500

To gain some picture of the salary structure of the 45 programs that year, data were analyzed for the 160 full-time faculty; 118 in Illinois and 42 in Iowa. This information was unknown or inappropriate for 13 faculty members including the four coordinators of religious orders who reported no salary.

The largest single group of all full-time faculty (coordinators and instructors) earned between \$6,000 and \$6,500. See table 4.20.

Table 4.20

ANNUAL SALARIES OF FULL-TIME FACULTY

Salary	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Unknown or inappropriate	12	(10.2)	1	( 2.4)	13	( 8.1)
4,000.01-4,500	-	-	4	( 9.5)	4	( 2.5)
4,500.01-5,000	2	( 1.7)	4	( 9.5)	6	( 3.8)
5,000.01-5,500	7	( 5.9)	10	(23.8)	17	(10.6)
5,500.01-6,000	12	(10.2)	5	(11.9)	17	(10.6)
6,000.01-6,500	20	(17.0)	2	( 4.8)	22	(13.8)
6,500.01-7,000	5	( 4.2)	2	( 4.8)	7	( 4.4)
7,000.01-7,500	10	( 8.5)	6	(14.3)	16	(10.0)
7,500.01-8,000	7	( 5.9)	1	( 2.4)	8	( 5.0)
8,000.01-8,500	12	(10.2)	2	( 4.8)	14	( 8.8)
8,500.01-9,000	3	( 2.5)	2	( 4.8)	5	( 3.1)
9,000.01-9,500	17	(14.4)	1	( 2.4)	18	(11.2)
9,500.01-10,000	5	( 4.2)	1	( 2.4)	6	( 3.8)
10,000.01-10,500	4	( 3.4)	-	-	4	( 2.5)
10,500.01-11,000	-	-	1	( 2.4)	1	( 0.6)
11,000.01-11,500	2	( 1.7)	-	-	2	( 1.3)
TOTALS	118	(100.0)	42	(100.2)	160	(100.1)

To illustrate the differential of salaries between the two groups, the median salaries were calculated and are reported by State in Table 4.21.

Table 4.21

MEDIAN SALARIES OF FULL-TIME FACULTY

	Illinois	Iowa	Combined
Coordinators	\$9,167	\$7,335	\$8,750
Instructors	\$6,750	\$5,275	\$6,319



This Table, shows there was a substantial difference in the median salaries between the two groups in both States. In each case, the overall median fell between each State's median for that group. The lower medians in Iowa may reflect the time period of the early stage of transferring program administration from local school systems to the newly formed area school systems as described earlier. A marked increase in faculty salaries occurred after these transfers.

#### SOURCE OF FACULTY SALARIES

Most commonly, faculty members received their salaries directly from the administrative agency of a program, though the original sources of monies for this purpose did vary as shown in Table 4.22.

Table 4.22

#### SOURCE OF FACULTY SALARIES

Source	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Public school only	8	27.6	13	81.2	21	46.7
Priv. parochial hosp. only	3	10.3	3	18.7	6	13.3
Pub.Sch. & Coop.Clin. Agency	8	27.6	-	-	8	17.8
MDTA only	7	24.1	-	-	7	15.5
Pub. Sch. & MDTA	2	6.9	-	-	2	4.4
County	1	3.4	-	-	1	2.2
TOTALS	29	99.9	16	99.9	45	99.9

Illinois programs utilized more sources than did Iowa where salary funds came from only two sources, public educational agencies or private hospitals; both sources being mutually exclusive. In Illinois, eight (28%) of the programs' faculty salaries were supported by a combination of sources. In some cases, the combination included the educational program and a cooperating clinical agency which either provided funds for partial support of faculty salaries or provided nurses from their staff to teach in the educational program.

A second common source of faculty salaries in Illinois programs were funds provided by the Manpower Development and Training Act (MDTA) of 1962. This federal legislation provides funds and services for training and retraining of unemployed and under-employed persons. The provisions of MDTA are administered primarily under the auspices of the United States Department of Labor and its network of state and local employment service offices. Federal, state and local education agencies cooperate by providing the training aspects provided for in the Act.

Table 4.22 shows that nine Illinois programs used MDTA funds for operational costs; seven were funded totally by this source, and two were supported by both the educational institution and MDTA funds.

No Iowa program used MDTA funds for operational costs. Rather, the practice in this State is to admit those students who qualify both for support from this source and for admission into a program, by slotting them into already operational programs. These students are referred to the program by the Iowa Employment Service and make application to the program as would any other applicant. In these instances, students receive tuition, fees, books, other school-related costs and personal financial support while enrolled in a program. Slightly over 25% of the students admitted to Iowa programs during the criterion class year (1966-67) were supported by MDTA funds. Some schools in Illinois follow a similar plan.

The faculty salaries in one Illinois program are paid by a County. This program is based in a hospital which is under the overall administration of the County Board of Supervisors. This Board provides the funding for the operational costs of this program.

#### FUTURE EMPLOYMENT PLANS OF FACULTY

One hundred of the 318 did not respond to this item. Perhaps many thought this information was to be submitted only if they planned to change positions, or it may be some preferred not to make known their plans. Table 4.2 shows that 37 of 164 respondents in Illinois and eight of 54 respondents in Iowa did not plan to return the following school year.

Table 4.2 3

#### FUTURE EMPLOYMENT PLANS

Will Remain	Illinois		Iowa	
	N	%	N	%
Yes	125	(76.0)	46	(85.0)
No	37	(23.0)	8	(15.0)
Unknown	2	( 1.0)	-	-
TOTALS	*164	(100.0)	**54	(100.0)

\*78 did not respond  
\*\*22 did not respond

Table 4.2.4 shows that of the 45 who planned not to return to their present position, 24 (53%) planned to accept another position and 14 (31%) did not. Four (9%) indicated they were undecided and the plans of the remaining three (7%) are unknown.

Table 4.24

FUTURE EMPLOYMENT PLANS OF THOSE  
PLANNING TO LEAVE PRESENT POSITION

Plan to Take Another Position	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Yes	20	(54.0)	4	(50.0)	24	(53.0)
No	12	(32.0)	2	(25.0)	14	(31.0)
Maybe	4	(11.0)	-	-	4	( 9.0)
Unknown	1	( 3.0)	2	(25.0)	3	( 7.0)
TOTALS	37	(100.0)	8	(100.0)	45	(100.0)

CHARACTERISTICS OF THE 45 FACULTY MEMBERS PLANNING TO LEAVE THEIR PRESENT POSITION.

Present Employing Agency

Seven of the 45 were faculty members in programs administered in a university setting; two in Illinois and five in Iowa. The five in Iowa constituted the total faculty of a demonstration program which, having served well the purpose for which it was established, was to be phased out at the end of the criterion class year. Of the remaining 40, 29 were in programs administered by local school boards, six in church administered programs, one in an area vocational-technical school and two in an area community college.

Employment Status

The employment status of one of the 45 is unknown. Of the remaining 44, 27 (61%) were employed full-time by the program, four (9%) part-time, and 13 (30%) had been employed for 100% time but for less than ten months.

Age

Of the 45 leaving, the ages of 41 were known: 21 (51%) were between 20 and 30, ages when mobility of self or husband is likely to be greatest; eight (20%) were over 50 years of age; and the remaining 11 (29%) ranged between the ages of 30 and 50.

Marital Status

The marital status of the 45 leaving is known for 40. Of these, 26 (65%) were married, nine (23%) were single, three (8%) were separated or divorced, one was widowed and one in a religious order.

## Professional Education Background

The nursing educational background is known for 40 of the 45. Twenty-three (58%) were registered nurses without a degree; 12 (30%) held a bachelors degree in nursing; one a B.A. degree in a field other than nursing; and four (10%) held a masters degree, one in nursing and three in a field other than nursing.

## EMPLOYMENT STABILITY OF FACULTY MEMBERS WORKING WITH CRITERION CLASSES

As was done with data on those faculty members who had terminated their employment prior to the criterion class school year (see Table 4.2), like data for these faculty members were also sorted according to the number of years a program had been in operation. This provided a meaningful criterion with which "length of employment" could be compared. The employment stability of criterion class faculty members was found to be quite similar to that found for faculty members who had terminated employment prior to the criterion class school year.

In Illinois, 51% and in Iowa, 41%, of the faculty members having contact with the criterion class had been employed for only one year prior to the criterion class year. Excluding those faculty members in programs which had been in operation only one year prior to the criterion class year, the percentages of faculty members employed one year are reduced to 39% in Illinois and 32% in Iowa. The data in Table 4.2 show that the 205 Illinois faculty members had a mean-years-of-employment of 2.63; Iowa, with 68 faculty members, had a mean of 2.53.

The difference in the two above indices is accounted for because Illinois had a proportionately higher number of faculty members with long tenure, five years or more.

Excluding programs in operation for two years or less; in Illinois, the greatest percentage (70%) of faculty members with one-year tenure were in the four programs which had been in operation for nine years and the next greatest percentage (57%) in the six-year old program. In Iowa, the greatest percentage (60%) of one-year tenured faculty members was in a 14-year old program and the next greatest (50%) in each of two programs; one in operation eight years, the other 18 years.

Table 4.25

NUMBER OF YEARS THOSE EMPLOYED IN A PROGRAM AT BEGINNING OF  
CRITERION CLASS YEAR HAD BEEN PREVIOUSLY EMPLOYED IN THAT PROGRAM

# Yrs. Prog. in Operation	Prior to Criterion	Class Year	Prog. No.	1 Year	2 Years	3 Years	4 Years	5 Years	6-9 Years	10-12 Years	Total Number Fac- ulty	
				N	%	N	%	N	%	N	%	
Illinois:												
1			2	25	(92.6)	2	( 7.4)				27 (100.0)	
2			1	5	(83.3)	1	(16.7)				6 (100.0)	
3			8	19	(41.3)	13	(28.3)	14	(30.4)		46 (100.0)	
5			3	7	(43.8)	2	(12.5)		6 (37.5)		16 (100.1)	
6			1	8	(57.1)	6	(42.9)				14 (100.0)	
7			1	4	(50.0)			1	(12.5)	3 (38.5)	8 (100.0)	
8			1	2	(40.0)					2 (40.0)	5 (100.0)	
9			4	17	(70.8)	2	( 8.3)		2 ( 8.3)		24 ( 99.9)	
10			2	3	(33.3)	1	(11.1)	2	( 8.3)	1 (11.1)	9 ( 99.9)	
12			1	3	(42.8)	1	(14.3)			1 (14.3)	7 (100.0)	
13			2	3	(30.0)	2	(20.0)	3	(30.0)	2 (20.0)	10 (100.0)	
14			2	6	(50.0)	2	(16.7)	1	( 8.3)	1 ( 8.3)	12 (100.0)	
18			1	3	(14.3)	3	(14.3)	2	( 9.5)	10 (47.6)	21 (100.0)	
			29	105	(51.2)	35	(17.1)	25	(12.2)	6 ( 5.4)	11 ( 1.5)	205 (100.1)
Iowa:												
1			2	6	(100.0)						6 (100.0)	
2			1			2	(100.0)				2 (100.0)	
3			2		(25.0)			4	(50.0)		8 (100.0)	
4			3		(30.0)			1	(10.0)		10 (100.0)	
6			1	1	(20.0)	2	(40.0)	1	(20.0)		5 (100.0)	
8			1	2	(50.0)	1	(25.0)				4 (100.0)	
9			2	4	(36.4)					2 (18.2)	11 (100.1)	
11			1	1	(25.0)			1	(25.0)		4 (100.0)	
13			1	3	(42.9)			2	(28.6)		7 (100.0)	
14			1	3	(60.0)			1	(20.0)		5 (100.0)	
18			1	3	(50.0)	1	(16.7)	1	(16.7)		6 (100.1)	
			16	28	(41.2)	18	(26.5)	8	(11.8)	2 ( 2.9)	68 (100.1)	



## CHAPTER 5

### SELECTION OF STUDENTS

Data reported in this Chapter were obtained through the interview with each program coordinator, using the Criterion Class I form as the interview format (Appendix A). The interview included items designed to identify each program's specific admission requirements, such as: education; age; health status; personal characteristics of race, sex, marital status and religion; and, the chronological sequence of procedures an applicant must complete before admission to the program.

#### ELIGIBILITY CRITERIA

All 45 programs had an established minimum age for admission; all but five had an established maximum age. However, there was notable flexibility in the application of these criteria, more pronounced with reference to the maximum age requirement.

#### Minimum Age

All programs gave either 17 or 18 years as their acceptable minimum age. See Table 5.1.

Table 5.1

#### MINIMUM AGE FOR ADMISSION

Age	Illinois		Iowa		Combined	
	N	%	N	%	N	%
17 years	26	(89.7)	12	(75.0)	38	(84.4)
18 years	3	(10.3)	4	(25.0)	7	(15.6)
TOTALS	29	(100.0)	16	(100.0)	45	(100.0)

The minimum age determination tended to be based on requirements set forth in the Nurse Practice Act of each State. The laws in Iowa<sup>1</sup> and Illinois<sup>2</sup> require that an applicant for practical nurse licensure be at least 18 years of age. The adoption of 17 or 18 years of age as an admission criterion ensures that the student will have reached the minimum 18 years of age by the time they make application for licensure.

<sup>1</sup>Law of Iowa as it Pertains to the Practice of Nursing (Des Moines: State of Iowa, 1964), page 15.

<sup>2</sup>The Illinois Nursing Act, Chapter 91 - Illinois Revised Statutes (Springfield: State of Illinois, 1966), page 11.

## Maximum Age

For 40 programs, the maximum age limitations on admission range from 35 years to 62 years. The remaining five programs reported no maximum. See Table 5.2.

Table 5.2

### MAXIMUM AGE LIMIT FOR ADMISSION

Age	Illinois		Iowa		Total	
	N	%	N	%	N	%
No Maximum	3	(10.3)	2	(12.5)	5	(11.1)
35 Years	-	-	1	( 6.3)	1	( 2.2)
45 Years	2	( 6.9)	-	-	2	( 4.4)
50 Years	4	(13.8)	1	( 6.3)	5	(11.1)
53 Years	1	( 3.5)	-	-	1	( 2.2)
54 Years	2	( 6.9)	-	-	2	( 4.4)
55 Years	16	(55.0)	12	(75.0)	28	(62.2)
62 Years	1	( 3.5)	-	-	1	( 2.2)
TOTALS	29	(99.9)	16	(100.1)	45	(99.8)

Eleven per cent of the programs had established no formal maximum age while nearly two-thirds set this limit at 55 years. The maximum age criterion appears to be flexible in the selection process of most programs; exceptions to the limit are allowed. Most programs evaluate applicants who are over the stated maximum age limit, on an individual basis. Some of the considerations include: marital status, financial needs, family responsibilities and other similar factors which might negate setting a specific age limitation in an individual situation.

## Minimum Education

An evident difference is shown between Illinois and Iowa when analyzing the minimum level of education required for admission to a program. See Table 5.3.

Table 5.3

### MINIMUM EDUCATION REQUIRED FOR ADMISSION

Level	Illinois		Iowa		Total	
	N	%	N	%	N	%
10th grade	25	(86.2)	-	-	25	(55.6)
11th grade	1	( 3.5)	-	-	1	( 2.2)
12 grade	3	(10.3)	16	(100.0)	19	(42.2)
TOTALS	29	(100.0)	16	(100.0)	45	(100.0)

The Iowa Nurse Practice Act requires an applicant for practical nurse licensure to be a graduate of an accredited high school or the equivalent.<sup>3</sup> Procedures for determining "equivalency" are established by law and give the State Superintendent of Public Instruction the power to issue a certificate acknowledging high school equivalency upon successful completion of the 12th grade level on the General Educational Development Examination (GED).<sup>4</sup> The Iowa Board of Nursing has accepted this procedure as meeting its requirements with respect to minimum education.

The Illinois Nurse Practice Act requires all applicants for practical nurse licensure to have completed the 10th grade or its equivalent.<sup>5</sup> The determination of "equivalence" is again by the use of the GED examination, generally using the 10th grade test. One Illinois program, however, does not routinely accept applicants on the basis of the GED examination.

Accordingly, 86 per cent of the Illinois programs require the 10th grade legally established minimum; one requires 11th grade; and three require a minimum of 12th grade. Of the latter four programs, one is administered by a local school board, one by a University, and the other two by church organizations.

#### Exclusions Based on Personal Characteristics

Each coordinator was asked if there were school or program policies which could exclude an applicant on the basis of sex, marital status, race, or religion. Three of the 45 programs reported this possibility. All three excluded men; one program in Illinois and two in Iowa. One of these two Iowa programs is privately controlled while the other Iowa program and the one Illinois program are publicly supported. One of the three excludes men because of limited rest room facilities; the other two reported no specific reason for their exclusion.

No coordinator indicated the existence of policies that could exclude an applicant from enrollment in their program on the basis of marital status, race, or religion.

#### ADMISSION PROCEDURE

To analyze the admission procedure of each program, the chronological list of steps elicited during the coordinator interview was interpreted and coded, then punched onto data cards. A preliminary analysis of these listings revealed three general stages in the application process: (1) preliminary, (2) intermediate, and (3) final. Each of these stages was further sub-divided into the individual steps involved. The maximum number of steps for any one stage was ten.

<sup>3</sup>Law of Iowa as it Pertains to the Practice of Nursing, Op. Cit., p. 15.

<sup>4</sup>Code of Iowa, Chapter 259A, (Des Moines: State of Iowa) 1966.

<sup>5</sup>The Illinois Nursing Act, Op. Cit., page 11.

The total number of steps in the application sequence ranged from nine to 17 for Illinois programs; a mean of 12.8 steps per program. In Iowa, the range was from five to 13; a mean of 9.06.

The preliminary analysis also revealed a wide variation among programs in the sequence of the steps. For example, some programs gave an application form as the initial step, while others did not issue an application blank prior to the completion of an interview or pre-testing. Certain steps, however, were common among all 45 programs. Due to this wide variation, this report describes the typical admission requirements and identifies the three general stages of the application procedure and the requirements found within each stage.

### Typical Steps

High school transcript: All programs, with exception of one in Illinois, require a high school transcript for each applicant; some request the transcript directly from the applicant's high school and others request the applicant to obtain and submit it.

The transcript requirement, however, may be misleading in terms of the value placed on high school grades for many programs indicated they do not, or only sometimes, consider the high school grade point average as an important criterion in the selection process. See Table 5.4.

Table 5.4

#### CONSIDERATION OF HIGH SCHOOL GRADE POINT IN THE SELECTION PROCESS

Response	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Yes	11	(38.0)	10	(62.5)	21	(46.7)
No	14	(48.3)	1	(6.25)	15	(33.3)
Sometimes	4	(13.8)	5	(31.25)	9	(20.0)
TOTALS	29	(100.1)	16	(100.0)	45	(100.0)

Relative to the importance of high school grades, the data show a difference in practice between the two States. Ten (63%) of the Iowa programs consider high school grades in the selection process; this is true in 11 (38%) of the Illinois programs. Conversely, 14 (48%) Illinois programs and one (6%) Iowa program do not consider high school grade point as an important factor in the selection process. Four (14%) programs in Illinois and five (31%) in Iowa "sometimes" consider high school grade point.

The facts that 24 (53%) of the 45 programs report they do not, or only "sometimes", consider the high school grades and that all but one of the 45 require submission of a high school transcript, suggests that

other items than the transcript are considered important in the selection process. Although no specific data on these items were collected as a part of this study, in addition to the grade point itself, one could speculate that importance is placed on anecdotal and previous school attendance records and on trends in grades received.

Pre-testing: All programs require pre-testing. Sixteen programs required two pre-testing sessions for each applicant. This practice was more prevalent in Illinois than in Iowa; 12 (41%) in Illinois and four (25%) in Iowa. See Table 5.5.

Table 5.5

NUMBER OF PRE-TEST SESSIONS PER APPLICANT

Number	Illinois		Iowa		Combined	
	N	%	N	%	N	%
1	17	(58.6)	12	(75.0)	29	(64.4)
2	12	(41.4)	4	(25.0)	16	(35.6)
TOTALS	29	(100.0)	16	(100.0)	45	(100.0)

The method of pre-testing varies dramatically between the two states. In Illinois, 16 (55%) of the programs have applicants write their first pre-test at Employment Service offices; this was true for one Iowa program. Initial contact by the applicant was either directly with the program or through the Employment Service who then referred the individual to the program. One program in each State used the testing services of nearby universities for initial pre-testing of applicants. See Table 5.6.

Table 5.6

AGENCY OR INSTITUTION CONDUCTING  
FIRST PRE-TEST SESSION

Agency or Institution	Illinois		Iowa		Combined	
	N	%	N	%	N	%
School (Program)	11	(37.9)	14	(87.5)	25	(55.6)
Employment Service	16	(55.2)	1	(6.3)	17	(37.8)
University Testing Service	2	(6.9)	1	(6.3)	3	(6.7)
TOTALS	29	(100.0)	16	(100.1)	45	(100.1)

For the 16 of the 45 programs requiring two testing sessions of each applicant, the second sessions were administered as shown in Table 5.7.



Table 5.7

AGENCY OR INSTITUTION CONDUCTING  
SECOND PRE-TEST SESSION

Agency or Institution	Illinois		Iowa		Combined	
	N	%	N	%	N	%
School (Program)	5	(41.7)	3	(75.0)	8	(50.0)
Employment Service	6	(50.0)	1	(25.0)	7	(43.8)
University Testing Service	1	( 8.3)	-	-	1	( 8.3)
TOTALS	12	(100.0)	4	(100.0)	16	(100.1)

Again, the majority of second pre-test sessions in Illinois are conducted by the Employment Service. That agency conducted the entire pre-testing of all applicants for nine Illinois programs. After an initial pre-testing by the Employment Service, one Illinois program sends its applicants to a nearby university for a second testing session. In Iowa, all programs administer at least one pre-test session themselves, and only two programs use the Employment Service offices for some pre-testing.

Forty three per cent of the total pre-testing conducted by all 45 programs was done in the final stage of the admissions procedure. This pattern appeared to be one that used the pre-test to reduce the number of applicants to be interviewed later. Twenty-five of the 45 programs attempted to administer some type of pre-test prior to the interview. The types of pre-tests administered, and an analysis of results, is reported in Part III of the final report.

Personal interview: A personal interview session is defined as an applicant being interviewed, in person, by one or more faculty members in a program or by other persons associated with the administrative agency or the State Employment Service.

Thirty-one (70%) of the 45 programs conducted one interview per applicant, while an additional 11 (24.5%) conducted two. In Illinois, two programs require three personal interviews per applicant and one requires four. See Table 5.8.

The interview(s) may have occurred during any one of the three admission stages; among programs the patterns varied greatly. Forty per cent of the initial interviews were conducted by the program coordinator only. A total of 90% were conducted by the coordinator and/or instructor(s). See Table 5.9

Table 5.8

## NUMBER OF INTERVIEWS PER APPLICANT

Number	Illinois		Iowa		Combined	
	N	%	N	%	N	%
1	16	(55.2)	15	(93.8)	31	(68.9)
2	10	(34.5)	1	(6.3)	11	(24.5)
3	2	(6.9)	-	-	2	(4.4)
4	1	(3.5)	-	-	1	(2.2)
TOTALS	29	(100.1)	16	(100.1)	45	(100.0)

Table 5.9

PERSON(S) CONDUCTING INITIAL  
INTERVIEW WITH APPLICANT

Person(s)	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Coordinator	12	(41.4)	6	(37.5)	18	(40.0)
Coordinator & Staff	4	(13.8)	9	(56.3)	13	(28.9)
Coordinator or Staff	6	(20.7)	1	(6.3)	7	(15.6)
Staff only	1	(3.5)	-	-	1	(2.2)
Employment Service	4	(13.8)	-	-	4	(8.9)
Coordinator & Employment Service	1	(3.5)	-	-	1	(2.2)
Counselor-PN program	1	(3.5)	-	-	1	(2.2)
TOTALS	29	(100.2)	16	(100.1)	45	(100.0)

In Iowa, interviewing is done only by faculty members. In Illinois, 11% of the initial interviews were conducted by the Employment Service, or cooperatively by that Service and the program coordinator. In the one Illinois program requiring only one interview, this is conducted by Employment Service counselors. One Illinois program employs its own counselor who does all their applicant interviewing.

In Iowa, only one program required more than one interview session per applicant. Rather, an attempt was made to visit briefly with the applicant at the time he obtained application forms and a formal interview session was scheduled for a later date.

In Illinois, 13 of the 29 programs generally interviewed applicants more than once. Sixty-nine per cent of the second interviews in Illinois are by program faculty or school-associated personnel. Of these, one program has its advisory committee interview applicants while in another, the Dean of the Junior College interviews applicants after they have been interviewed by program staff.

Table 5.10 shows persons who conducted second interview sessions.

Table 5.10

PERSON(S) CONDUCTING SECOND INTERVIEW  
WITH APPLICANT

Person(s)	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Coordinator	5	(38.5)	1	(100.0)	6	(42.9)
Coordinator or staff	1	( 7.7)	-	-	1	( 7.1)
Staff only	1	( 7.7)	-	-	1	( 7.1)
Employment Service	4	(30.8)	-	-	4	(28.6)
Advisory Committee	1	( 7.7)	-	-	1	( 7.1)
Dean, Comm. College	1	( 7.7)	-	-	1	( 7.1)
TOTALS	13	(100.1)	1	(100.0)	14	(99.9)

While Tables 5.8 and 5.10 indicate that 14 programs generally conduct more than one interview per applicant, this is not required for all applicants. In some cases, the second interview is in the final stage of application and is conducted only if more information is needed.

Table 5.8 shows that in 70% of the 45 programs, their applicants are interviewed once and Table 5.9 shows that 40% of the first interviews are conducted by the coordinator only. If interviews are important enough to be required as a part of the total selection process, one might question the soundness of decisions based on one interview by one person. Such decisions could be highly subjective and unless corroborated by a second interviewer, could result in the rejection of good candidates.

Health records: The most common health-related admission requirements were physical examination, dental examination, immunizations, and chest x-ray.

Physical examination: All 45 programs required a physical examination. Most commonly, the applicant was permitted to be examined by his personal physician; however, some programs designated a specific physician for all physical examinations. See Table 5.11.

Table 5.11

PERSON CONDUCTING PHYSICAL EXAMINATIONS

Person	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Physician-Personal	17	(58.6)	15	(93.8)	32	(71.1)
Physician-Program-						
Designated	10	(34.5)	1	( 6.3)	11	(24.4)
Both	2	( 6.9)	-	-	2	( 4.4)
TOTALS	29	(100.0)	16	(100.1)	45	(99.9)

In Iowa, all but one of the 16 programs had their applicants obtain a physical examination from their personal physician. In Illinois, 10 of the 29 programs required the physical examination to be conducted by a program-designated physician. Two Illinois programs required that the applicant be examined by both the personal physician and a program-designated physician, both examinations becoming a part of the applicant's file. One of these two programs required one physical examination before entry and another within eight weeks after admission; the other required both examinations before entry. In Iowa, the physical examination was required pre-admission in all but two programs; these required the physical examination of only those admitted and gave them two weeks after the beginning of classes to submit the results.

About one-third of all programs indicated that some type of screening decision was made on the basis of the physical examination, another one-third said that the physical examination was merely a form of dependent information for the final stage of the application process, and the remaining one-third indicated that no concrete decisions were made on the basis of the physical examination. In some cases, programs made a selection decision prior to the examination and made acceptance dependent upon a subsequent physical examination.

Extensive efforts were made to determine the purpose and use of physical examinations. From discussion with faculty members, overweight was the only health item of common concern that was related to their use.

Dental examination: Thirty-three (73%) of all programs required a dental examination. See Table 5.12.

Table 5.12  
DENTAL EXAMINATION ADMISSION REQUIREMENT

Response	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Yes	23	(79.3)	10	(62.5)	33	(73.3)
No	3	(10.3)	4	(25.0)	7	(15.6)
Recommended	1	( 3.4)	2	(12.5)	3	( 6.7)
Sometimes	2	( 6.9)	-	-	2	( 4.4)
TOTALS	29	(99.9)	16	(100.0)	45	(100.0)

Two of the three Illinois programs not requiring a dental examination of all applicants, indicated it becomes a requirement should the physician conducting the physical examination recommend it. Data were not collected regarding the determination of the dentist to do the dental examination, or at what stage in the admission procedure this examination is done.

Immunizations: Included in the health records, and criteria commonly required of applicants, is proof of selected immunizations. Practice with regard to this requirement, and the specific immunizations required, vary greatly among programs. However, 40 (89%) of all programs specifically required proof of selected immunizations. See Table 5.13.

Table 5.13

## IMMUNIZATION REQUIREMENT FOR ADMISSION

Response	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Yes	24	(82.9)	16	(100.0)	40	(88.9)
No	1	( 3.4)	-	-	1	( 2.2)
Recommended	3	(10.3)	-	-	3	( 6.7)
Sometimes	1	( 3.4)	-	-	1	( 2.2)
TOTALS	29	(99.9)	16	(100.0)	45	(100.0)

In Illinois, only one program did not require immunizations, three programs recommended selected immunizations, and one left this determination to the program-designated physician who conducted the physical examinations.

Among immunizations required were those for smallpox, tetanus, diphtheria, scarlet fever, and influenza. Table 5.14 makes a comparison between the types of immunizations most commonly required and the degree to which they are required (or recommended) in each State.

Table 5.14

## TYPES OF IMMUNIZATIONS REQUIRED FOR ADMISSION

Response	<u>Smallpox</u>		<u>Tetanus</u>		<u>Typhoid</u>		<u>TB</u>		<u>Polio</u>		<u>Diphth.</u>	
	Ill.	Ia.	Ill.	Ia.	Ill.	Ia.	Ill.	Ia.	Ill.	Ia.	Ill.	Ia.
Yes	24	16	17	14	14	11	8	7	15	14	17	14
No	1	-	9	2	9	4	19	9	10	2	8	1
Recommended	3	-	3	-	5	-	-	-	3	-	3	-
Sometimes	1	-	-	-	1	1	2	-	1	-	1	1
TOTALS	29	16	29	16	29	16	29	16	29	16	29	16

Forty of the 45 programs required smallpox immunization. Of the remaining five; three recommended this, one left this decision to the applicant's physician and one definitely did not concern itself with the smallpox immunization.

Next most common were immunizations against tetanus and diphtheria followed in order by polio, typhoid and tuberculosis.

Chest x-ray: Forty-two (93%) of the 45 programs required a chest x-ray for admission. See Table 5.15.



Table 5.15

## CHEST X-RAY REQUIREMENT FOR ADMISSION

Response	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Yes	28	(96.6)	14	(87.5)	42	(93.3)
No	1	( 3.4)	1	( 6.3)	2	( 4.4)
Sometimes	-	-	1	( 6.3)	1	( 2.2)
TOTALS	29	(100.0)	16	(100.1)	45	(99.9)

Table 5.14 shows that 15 programs required the Mantoux (skin test) for tuberculosis. While data do not reveal which programs required both, or if one was in lieu of the other, it is evident that several programs required the chest x-ray only if the Mantoux (skin test) was positive.

Personal references: Eight (50%) of the 16 Iowa programs and 27 (93%) of the 29 Illinois programs required personal references on each applicant. Among these programs requiring personal references, the eight Iowa programs obtained them in the preliminary stage of the application procedure and 22 of the 27 in Illinois collected them in the intermediate or the final stage. See Table 5.16.

Table 5.16

STAGES OF APPLICATION IN WHICH  
PERSONAL REFERENCES WERE REQUIRED

Stage	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Preliminary	5	(18.5)	8	(100.0)	13	(37.1)
Intermediate	12	(44.4)	-	-	12	(34.3)
Final	10	(37.0)	-	-	10	(28.6)
TOTALS	27	(99.9)	8	(100.0)	35	(100.0)

It appears that very few decisions are based solely on references. All but two programs indicated that they were used in context with other background data when selection decisions were made.

Typical steps commonly found in each stage of the admission procedure:

Preliminary stage: Procedures and requirements found in this stage include providing the inquirer with program information and opening a file for the applicant who has declared intent to apply for admission. Most common are: sending a brochure and forms for completing an application, requesting submission of a high school transcript, and collecting personal references.

Ten (22%) of the 45 programs administered some type of pre-test. In seven of these 10, the Employment Service pre-tested for those programs which were administered with Manpower Development and Training Act (MDTA) funds or which enrolled students receiving financial assistance under this Act. The only pre-test session for four of the ten programs occurred in this stage; three in Illinois conducted by the Employment Service, and one in Iowa conducted by the program coordinator.

Of the eight (50%) of the Iowa programs requiring personal interviews, all conducted these during this stage. Fourteen (31.1%) of the 45 programs conducted some type of personal interview and these interviews account for 23.8% of all interview sessions conducted during the three stages. In this stage, interviews generally tended to be of an introductory type, with each applicant scheduled for a more detailed interview in a later stage of the application process. Five (11%) of the programs conducted their only interview with the applicant during this stage.

Intermediate stage: While there was a variety of steps in the intermediate state, pre-testing was the most common; 64% of all pre-test sessions conducted by the 45 programs occurred during this stage. The next most common step was the personal interview. However, only 34% of all interview sessions were conducted in this stage. These intermediate-stage interviews are the first for two programs, the only one for 12, and the last for three. Nineteen of the programs conducted at least one interview with the applicant during this stage.

Final stage: This stage primarily involved interviewing, completing health records, reviewing qualifications, student selection decisions and the notification to applicants of their acceptance or rejection.

The largest number of interviews, about 45%, were conducted in this final stage. By this time, a rather complete file of information on each applicant included test scores; references, high school records; and, in some cases, preliminary interview data.

#### Personnel Involved in Determination of Student Selection

Most often the selection of applicants to be admitted to a program is a function of the program coordinator and faculty. Table 5.17 shows that there are variations from this pattern, however.

One pattern not found in Iowa, but used by about one-third of the Illinois programs, was selection by an admissions committee other than faculty members. In three Illinois programs, student selection was the responsibility of the State Employment Service or of that Service in cooperation with the program coordinator.

Table 5.17

## METHOD OF APPLICANT SELECTION

Method of Selection	Illinois		Iowa		Combined	
	N	%	N	%	N	%
Admission Committee	8	(32.0)	-	-	8	(24.2)
Committee & Coordinator	1	( 4.0)	-	-	1	( 3.0)
Coordinator & Instructors	7	(28.0)	3	(37.5)	10	(30.3)
Coordinator	2	( 8.0)	-	-	2	( 6.1)
Instructors	1	( 4.0)	5	(62.5)	6	(18.2)
Coordinator & Employment Service	2	( 8.0)	-	-	2	( 6.1)
Employment Service	1	( 4.0)	-	-	1	( 3.0)
Others	3	(12.0)	-	-	3	( 9.1)
TOTALS	25	(100.0)	8	(100.0)	33*	(100.0)

\* 12 programs have been omitted from this analysis due to variations in procedures and alternatives which could not be classified in above manner.

Under the "other" category, the coordinator of one parochial program and the priest in that parish select the students. In two programs, selection is referred to either the counseling department or an admissions committee when there is lack of agreement among the faculty members in the program.

With relation to the total admission process, across programs there were differences in selection criteria and procedures; in required items, in the sequence of procedures and in the number of steps involved. In great measure, this is because most Illinois programs did not require high school, either by completion or equivalency. Applicants with less than a high school educational achievement may apply but not be admissible. Pre-tests, particularly in large cities, were generally used as the first screening device in order to reduce staff time spent in interviewing and pursuing personal references, the latter procedures being delayed pending satisfactory pre-test results.

## CHAPTER 6

### CURRICULUM

#### DESIGN AND IMPLEMENTATION

Two methods were used to collect the data reported in this Section: (1) each of the 45 programs (16 in Iowa and 29 in Illinois) submitted a curriculum sequence utilized for its criterion class, and (2) a personal interview was conducted with the coordinator/director of each program.

#### DESIGN OF DATA COLLECTION INSTRUMENTS

##### Curriculum Sequence Format

The research staff designed a grid format based on 52 weeks (five days per week); deemed appropriate because practical nurse preparatory programs, nation-wide, are predominately one year in length and involve students Mondays through Fridays. The broad areas of curriculum content for practical nurse education, published by the U. S. Office of Education and the National League for Nursing, served as a guide for the development of a list of 32 types of learning experiences. Added to the list were blank lines on which programs could identify content areas taught but not already listed. This list was to be utilized by each program to plot the sequence of the areas of instruction in its curriculum on the 52-week grid, and by means of specified symbols, to indicate: content area is taught, learning experience is observational only (2 days or less), or content area is not taught.

##### Coordinator/Director Interview Format

A coding format was designed for the use by an interviewer in recording additional pertinent data obtained from the coordinator/director of each program; e.g., starting and completion dates of criterion class, placement of specified clinical experiences in the curriculum sequence, types and number of affiliating clinical agencies used, degree of faculty involvement in clinical supervision of students, student compensation practices, in-school scheduled study hours, etc.

The above-described data collection instruments are shown in Appendix A .

#### COLLECTION OF CURRICULUM SEQUENCE DATA

The number of curriculum sequence patterns utilized by one class of students is largely determined by the relationship among the number of classes enrolled per year, the total student enrollment, and the availability of clinical facilities at a given time. Each program was requested to submit only one sequence, and to indicate if it were the only sequence used, the most commonly used sequence, or the most preferred of equally used sequences.

To plot the curriculum sequence on the 52-week grid format, each program was to first blacken out the full weeks, and then any additional days, when students were not involved in planned learning activities. The weeks and days remaining were considered to be "actual in-school time", a common base on which the 45 curriculum sequences could be studied.

The faculty was then to use the list of 32 content areas and three symbols to plot on the 52-week grid format: each type of learning experience provided during the "actual in-school time", its length, and the week(s) during which it occurred.

## FINDINGS

Unless otherwise indicated, the findings are based on data pertinent to the criterion classes of the 45 programs studied, 16 in Iowa and 29 in Illinois.

### Length of Curriculum

#### Starting Dates

Among programs, these ranged from August 8, 1966 to January 9, 1967. Thirty-five (78%) started prior to October 1, predominately during the first two weeks of September. Of the 10 (22%) which started between October 1 and January 9, all but one, a church-administered program, admitted multiple classes each year; six were administered totally with Manpower Development and Training Act funds, the availability of which was the major determinant of the starting dates.

#### Over-All Length of Curriculum

Forty-three (95.5%) of the programs reported their over-all length to be within a 52-week period; of the remaining two, one was 53 weeks, the other 55. However, vacation periods granted by the latter two programs made it possible to study all 45 programs on a common base of 52 weeks.

#### Time Off Granted During Over-All Length of Curriculum

Among the 45 programs, the number of full weeks off ranged from one to nine; most commonly, four. Among the 44 programs for which this information is known, additional days off for legal holidays, holy days, faculty workshops and/or seminars, etc., ranged in number from two to nineteen; most commonly, six. See Table 6.1. Table 6.2 shows that the full weeks off occurred primarily at Christmas time and terminally, and that more than one-third of the programs granted full weeks off either in late spring or early summer.

#### Full Weeks of "Actual In-School Time" During 52-Week Period

This was determined for each program by use of the following formula:



Table 6.1

**TIME OFF GRANTED DURING PROGRAM**  
(Based on 52 weeks)

Number of Weeks	Full Weeks Off				Number of Days	Additional Days Off			
	Programs					Programs			
	Ill.	Iowa	Com- bined	%		Ill.	Iowa	Com bined	%
1	1		1	( 2.2)	1				
2	10		10	(22.2)	2	2	1	3	( 6.8)
3	5	3	8	(17.8)	3				
4	13	2	15	(33.3)	4	2		2	( 4.6)
5		5	5	(11.1)	5	3	3	6	(13.6)
6		4	4	( 8.9)	6	7		7	(15.9)
7		1	1	( 2.2)	7	3	2	5	(11.4)
8					8	2	4	6	(13.6)
9		1	1	( 2.2)	9	2	2	4	( 9.0)
Totals	29	16	45	(100 )	10	2	2	4	( 9.0)
					11		1	1	( 2.3)
					12	1		1	( 2.3)
					13	1	1	2	( 4.6)
					14	1		1	( 2.3)
					15				
					16				
					17				
					18				
					19	2		2	( 4.6)
					Totals	28*	16	44*	(100 )

\*Unknown for one program

Table 6.2

**TIME OF YEAR FULL WEEKS OFF WERE GRANTED**  
(Based on 52 Weeks)

Weeks	Xmas Holidays				Spring or Early Summer				Terminally			
	Programs				Programs				Programs			
	Ill.	Iowa	Com- bined	%	Ill.	Iowa	Com- bined	%	Ill.	Iowa	Com- bined	%
1	16	12	28	(73.7)	9	3	12	(70.6)	3		3	( 9.4)
2	6	4	10	(26.3)	4		4	(23.5)	6	3	9	(28.1)
3									4	3	7	(21.9)
4					1		1	( 5.9)	3	7	10	(31.3)
5										2	2	( 6.2)
6										1	1	( 3.1)
Totals	22	16	38	(100 )	14	3	17	(100 )	16	16	32	(100 )

$$52 \text{ (weeks)} \times 5 \text{ (days/week)} - \left[ \frac{[(\# \text{ of full weeks off}) \times 5 \text{ days/week}] + [(\# \text{ of additional days off})]}{5} \right]$$

Among the 44 programs for which these data are known, the number of full weeks in which students were involved in planned learning experiences ranged from 42 to 51. The actual in-school time for approximately one-half of the programs was either 46 or 47 weeks. See Table 6.3.

Table 6.3

FULL WEEKS OF ACTUAL IN-SCHOOL TIME (Based on 52 weeks - 5 days/week)				
Weeks	Programs			
	Illinois	Iowa	Combined	%
51	1		1	( 2.3)
50	1		1	( 2.3)
49	7		7	(16.0)
48	3	1	4	( 9.0)
47	9	3	12	(27.3)
46	5	4	9	(20.5)
45	2	2	4	( 9.0)
44		4	4	( 9.0)
43		1	1	( 2.3)
42		1	1	( 2.3)
Totals	28*	16	44*	(100.0)

\*Unknown for one program

### Curriculum and Curriculum Sequence

#### Degree of Utilization of Sequence

Almost two-thirds of the 44 programs which submitted a curriculum sequence indicated that it was "the most preferred of equally used sequences". Only six indicated that the use of just one sequence was adequate to provide the required learning experiences for all students in the criterion class. See Table 6.4.

Table 6.4

DEGREE OF UTILIZATION OF CURRICULUM SEQUENCE				
	Illinois	Iowa	Combined	%
Only sequence used	2	4	6	(13.6)
Most commonly used sequence	4	5	9	(20.4)
Most preferred of equally used sequences	22	7	29	(66.0)
Totals	28	16	44	(100.0)

## Two Phases of Curriculum

A review of the 45 sequences of areas of instruction showed that the curriculum of each program consisted of two phases: a basic phase, in which more instruction was given in the classroom setting than in the clinical areas of affiliating patient-care agencies; and an advanced phase, in which the greater portion of instruction was given in clinical areas and less in the classroom.

### Basic Phase

Among the 45 programs, this phase ranged in length from 11 to 22 weeks; in almost one-half (22 programs), it was either 16 or 17 weeks. In 31% (14) it was between 11 and 15 weeks and in 20% (19), between 18 and 22. See Table 6.5.

Table 6.5

#### NUMBER OF WEEKS IN BASIC PHASE OF CURRICULUM

Number of Weeks	Programs			
	Ill.	Iowa	Combined	%
11	1	1	2	( 4.5)
12	1	1	2	( 4.5)
13	1	1	2	( 4.5)
14	2		2	( 4.5)
15	1	5	6	(13.2)
16	8	2	10	(22.2)
17	6	6	12	(26.6)
18	4		4	( 8.9)
19	2		2	( 4.5)
20	1		1	( 2.2)
21	1		1	( 2.2)
22	1		1	( 2.2)
Totals	29	16	45	(100 )

Classroom content offered during this phase included the following courses:

- Fundamentals of Nursing (Nursing Arts)
- Body Structure and Function
- Personal, Vocational and Community Relationships
- Communication Skills
- Basic Nutrition
- Human Growth and Development
- Family and Life Span
- Personal and Community Health
- First Aid and Disaster Nursing

Many programs indicated that they correlated these early offerings as much as possible and that, while content in these courses was concentrated during this basic phase, it was integrated with subsequent learnings throughout the year.

Generally, the basic phase started with a short orientation period followed by theory presentations in the classroom setting and the supervision of student practice in a simulated clinical setting, a nursing arts laboratory. In conjunction with the Fundamentals of Nursing course, students also received early observational experiences and supervised practice of beginning nursing skills in the clinical facilities of affiliating health care agencies. The point in time when these early clinical experiences occurred varied among programs, but in all cases they were obtained either in a medical-surgical or geriatric clinical area, and not in the areas of obstetrics or pediatrics. Many programs indicated their desire for these initial experiences to occur earlier but that the delivery time of student uniforms was a major deterrent.

#### Advanced Phase

As shown earlier in Table 6.5, two programs had completed the basic phase and were ready to enter this advanced phase as early as the twelfth week, about one-half in the 16th or 17th week and it was the 23rd week when the last program had reached this point.

Among the 45 programs, the broad areas of nursing covered in this phase included a block of instruction in the care of:

1. adults (medical-surgical)
2. mothers and newborns (obstetrics)
3. children (pediatrics)
4. the aged (geriatrics)
5. the mentally ill (psychiatrics)

All programs included a block of instruction in at least three of the above areas: care of adults (medical-surgical), of mothers and newborns (obstetrics), and of children (pediatrics). While some programs included only these three, others also included a specific block of instruction in either care of the aged or the mentally ill, or both.

Ten (22%) of the 45 programs included only the first three areas, 23 (51%) included the first four, three (7%) included the first three and (5), and nine (29%) included all 5 areas. See Table 6.6.

Important to note, however, is that among the 10 programs which covered only the first three areas, all indicated that they included content on care of the aged in the block of instruction on Care of Adults; and, the majority pointed out that while they provided no specific clinical experience in care of the mentally ill, they did integrate mental health concepts throughout both phases of the curriculum. Though the remaining few failed to specifically indicate that the latter was their practice also, it seems not inappropriate to assume that it was.

Table 6.6

## AREAS OF INSTRUCTION IN ADVANCED PHASE

Areas of Instruction	# of Programs	% of Programs
Three areas only:	10	(22.2)
1. Care of Adults		
2. Care of Mothers and Newborn		
3. Care of Children		
Three above areas + Care of the Aged	23	(51.1)
Three above areas + Care of the Mentally Ill	3	( 6.7)
Three above areas + Care of the Aged <u>and</u> Care of the Mentally Ill	9	(20.0)
Totals	45	(100 )

## Number of In-School Study Hours Scheduled for Students

During the basic phase, about one-quarter (11) of the programs did not schedule study hours; 46.7% (21 programs) scheduled five study hours per week; and the number of planned study hours per week among the remaining 13 programs ranged from one to eight.

During the advanced phase, 57.8% (26) of the programs did not schedule study hours; six programs scheduled two hours; six, five hours; and the remaining seven programs scheduled between one and three hours. See Table 6.7.

Table 6.7

## NUMBER OF SCHEDULED IN-SCHOOL STUDY HOURS PER WEEK

Scheduled Study Hours Per Week	During Basic Phase (Predominately Classroom)				During Advanced Phase (Predominately Clin. Experiences)			
	Ill.	Iowa	Combined	%	Ill.	Iowa	Combined	%
0	1	10	11	(24.5)	12	14	26	(57.8)
1	1	1	2	( 4.4)	3		3	( 6.8)
2	2	1	3	( 6.8)	5	1	6	(13.3)
3	2		2	( 4.4)	1	1	2	( 4.4)
4		1	1	( 2.2)	1		1	( 2.2)
5	19	2	21	(46.7)	6		6	(13.3)
6	1	1	2	( 4.4)	1		1	( 2.2)
7	1		1	( 2.2)				
8	2		2	( 4.4)				
Totals	29	16	45	(100 )	29	16	45	(100 )



### Degree of Concurrency of Classroom and Clinical Teaching

In 33 (73%) of the 45 programs, classroom content and related clinical experiences were provided concurrently in each of the broad areas covered. Four (9%) showed that concurrent teaching occurred in at least one area but not consistently throughout all areas; and in eight (18%) of the programs there was no evidence that this occurred at any time. The inconsistency or absence of concurrent teaching in these 12 programs was clearly evident in their curriculum sequences, which showed that students were involved in classroom instruction in one broad area on the same days they were involved in clinical experience in another.

### Faculty Involvement in Supervision of Student Clinical Experiences

The degree of faculty involvement in the supervision of students in clinical settings was determined for the obstetrical area specifically and the remaining areas, generally. This is because in an obstetrics area restrictions are placed on the in- and out-flow of personnel because of potential contamination. This is especially true of the newborn nursery. Therefore, nursing service personnel often prefer to provide the clinical supervision of students. If this is mutually agreeable, the educational institution then delegates this supervisory responsibility to the service agency for the duration of student learnings in the care of mothers and newborns.

In the obstetrics area, faculty in slightly over one-half of the programs supervised their students at all times; in 17 (37.8%) of the programs, some; and in four (8.8%), none.

In all clinical areas but obstetrics, the faculty members in 37 (82.3%) of the 45 programs supervise students at all times and in 8 (17.7%) of the programs, some of the time. There was no program in which faculty members were never involved.

The majority noting "some" indicated that the faculty and nursing service personnel plan student learning experiences cooperatively but that the actual supervision is delegated to nursing service personnel in close communication with faculty members. See Table 6.8.

Table 6.8  
DEGREE OF FACULTY INVOLVEMENT IN SUPERVISION OF  
STUDENTS IN CLINICAL AREAS

Degree of Faculty Involvement	In All Areas Except Obstetrics Programs				In Obstetrics Programs			
	Ill.	Iowa	Combined	%	Ill.	Iowa	Combined	%
Full	26	11	37	(82.3)	16	8	24	(53.4)
Some	3	5	8	(17.7)	11	6	17	(37.8)
None					2	2	4	( 8.8)
Totals	29	16	45	(100 )	29	16	45	(100 )

## Week of First Occurrence of Specified Types and Amounts of Clinical Experiences

### First observation experience

In three of the 45 programs the first observation experience occurred during the first week of the program; in almost one-half (22) of the programs, by the fifth week; and in all programs, by the fifteenth.

### First patient contact

Students in only four programs had this experience during the first month; in about one-half of the programs, by the sixth week; and in all programs, by the fifteenth week.

### First four hours of clinical experience per week

The first week that students obtained a minimum of four hours/week of clinical experience occurred between the first and the sixteenth week, among all programs; nearly one-half, by the seventh week.

### First 10 hours of clinical experience per week

Since less than one-half of the 45 programs had their students in clinical areas for their first 10 hours/week clinical experience by the sixteenth week, the majority of students first obtained this amount of clinical experience following completion of the basic phase. By the twenty-first week all students had been in clinical areas a minimum of ten hours per week.

### First 20 hours of clinical experience per week

This information is known on 44 of the 45 programs. Four programs indicated that the maximum hours/week that their students were in clinical areas at any time during the year were 16, 17, 18 and 19 respectively. For purposes of this study, these four programs were treated with those in which 20 hours per week was both the maximum and minimum hours of clinical experience in any given week during the year.

The students in one program received this type and amount of experience as early as the ninth week. By the sixteenth week, students in 13 (29.8%) of the programs had had this amount and by the seventeenth week, 50% (22 programs). This sharp increase reflects the number of programs which ended the basic phase of the curriculum in the sixteenth week and began the advanced phase in the seventeenth week. All but three programs were providing this minimum amount of 20 hours/week by the 23rd week and these three provided it in the 24th, 26th and 29th week, respectively. The majority of students did not receive this amount of clinical experience until they were in the advanced phase. Table 6.9 shows, by program, the week in which the above types and amounts of clinical experience first occurred.

Table 6.9

WEEK OF FIRST OCCURRENCE OF SELECTED TYPES AND AMOUNTS OF  
CLINICAL EXPERIENCES

Clinical Experiences															
Week	1st Clin. Observation			1st Patient Contact			1st 4 hrs. Clin. Exp.			1st 10 hrs. Clin. Exp.			1st 20 or maximum hrs. Clin. Exp.		
	Ill.	Ia.	Com- lative %	Ill.	Ia.	Com- lative %	Ill.	Ia.	Com- lative %	Ill.	Ia.	Com- lative %	Ill.	Ia.	Com- lative %
1	3	3	( 6.7 )	1	1	( 2.2 )	2	2	( 4.5 )						
2	3	2	(17.8)	1	1	( 6.7 )									
3		2	(22.3)												
4	3	3	(35.6)		1	( 8.9 )									
5	5	1	(48.9)	5	2	(24.5)	5	6	(17.8)	2	2	( 4.5 )			
6	3	2	(60.0)	7	3	(46.6)	6	8	(35.5)	1	1	( 6.7 )			
7	2	3	(71.1)	2	5	(62.2)	1	4	(46.6)	2	2	(11.2)			
8	1	2	(77.8)	3	3	(75.5)	1	4	(57.7)	1	1	(13.4)			
9	6	6	(91.1)	4	4	(84.4)	3	1	(66.6)	1	1	(15.6)			
10				3	3	(91.1)	3	2	(77.7)						
11	1	1	(95.6)	1	1	(95.6)	1	1	(82.2)	2	2	(20.1)	1	1	( 2.3 )
12		2			2			2	(84.4)						
13							1	1	(86.6)	2	1	(22.3)	1	1	( 4.6 )
14	1	1	(97.8)	1	1	(97.8)	1	1	(88.8)	2	2	(26.8)	1	1	( 6.9 )
15	1	1	(100 )	1	1	(100 )	2	2	(93.3)	3	2	(31.3)	2	2	( 9.2 )
16							3	3	(100 )	2	3	(38.0)	2	2	(13.8)
17										2	5	(49.1)	2	3	(18.4)
18										6	9	(69.1)	6	9	(29.8)
19										5	5	(80.2)	1	3	(50.2)
20										3	3	(86.9)	2	1	(59.2)
21										3	1	(95.8)	5	1	(66.0)
22										1	1	(100 )	2	2	(79.6)
23													2	3	(84.2)
24													2	1	(91.0)
25													1	1	(93.3)
26													1	1	(95.6)
27														1	
28															
29															
Totals	29	16	45 (100 )	29	16	45 (100 )	29	16	45 (100 )	29	16	45 (100 )	28*	16	44* (100 )

\*Unknown for one program.

### Hours of Day in Clinical Areas - First Week of Minimum of 20 Hours Experience

In Illinois, the hours of experience in this week ranged from 20 (in 8 programs) to between 22 and 40 hours in the remaining 21 programs. In 12 programs clinical experiences occurred only between 7:00 A.M. and noon and in 15 they occurred predominately during these hours. In one, they occurred predominately between noon and 6:00 P.M.; in no program were they confined solely to these hours.

Each of the 16 Iowa programs had exactly 20 hours of clinical experience in this week. Two confined their clinical experiences to between 7:00 A.M. and noon; and 12 held theirs predominately within these hours. Two programs had 10 hours in each of the periods, 7:00 A.M. to noon and noon to 6:00 P.M. No program utilized the noon to 6:00 P.M. period only.

Among all 45 programs, the number of morning hours of clinical experience ranged from 10 to 30 and the afternoon hours, from two to eighteen. See Table 6.10.

### Number of Weeks of 20 or More Hours of Clinical Experience

The number of weeks in which students received 20 or more hours of clinical experience varied among the 45 programs from 20 to 39; most commonly this was 32 weeks (nine programs), and next most commonly, 30 weeks (seven programs). In slightly over one-half of the programs the number of weeks in which a minimum of 20 hours of clinical experience were planned ranged from 29 to 32. See Table 6.11.

### Student Learning Experiences Provided in Advanced Phase

For the 44 programs for which this information is known, this portion of the report briefly describes how programs provided the general and the special learning experiences in each of the five areas of instruction. The special learnings usually occurred during specifically planned student rotations within an area.

#### General Learning Experiences

Care of Adults (medical-surgical): Five programs indicated that they separated the medical from the surgical classroom and clinical learnings; the remaining 40 combined the two. For purposes of this study, the number of weeks which the five above programs devoted to the separate medical and surgical areas were totaled and treated the same as were the combined medical-surgical weeks in the other 40 programs. In general, the learnings in this area related to the care of persons older than those in pediatrics (care of children) and younger than those in geriatrics (care of the aged) though 12 of the programs included geriatrics learnings in this area rather than as a separate block of instruction.

Table 6.10

HOURS OF DAY IN CLINICAL AREAS - FIRST WEEK  
OF MINIMUM OF 20 HRS. CLINICAL EXPERIENCE

Hours	A.M. 7:00 - Noon				P.M. Noon - 6:00			
	Ill.	Iowa	Combined	%	Ill.	Iowa	Combined	%
0					13	2	15	(33.3)
1								
2					2		2	( 4.4)
3								
4								
5					1	4	5	(11.1)
6					1	4	5	(11.1)
7						1	1	( 2.2)
8					3	3	6	(13.6)
9					2		2	( 4.4)
10		3	3	( 6.7)	3	2	5	(11.1)
11					1		1	( 2.2)
12	1	4	5	(11.1)				
13		1	1	( 2.2)				
14		3	3	( 6.7)				
15		3	3	( 6.7)	2		2	( 4.4)
16	3		3	( 6.7)				
17								
18	1		1	( 2.2)	1		1	( 2.2)
19								
20	9	2	11	(24.4)				
21								
22								
23	3		3	( 6.7)				
24								
25	10		10	(22.2)				
26								
27								
28	1		1	( 2.2)				
29								
30	1		1	( 2.2)				
Totals	29	16	45	(100 )	29	16	45	(100 )



Table 6.11

NUMBER OF WEEKS - 20 OR MORE HOURS  
CLINICAL EXPERIENCE

Number of Weeks	Programs			
	Illinois	Iowa	Combined	%
20	1		1	( 2.2)
21				
22				
23	1		1	( 2.2)
24	1		1	( 2.2)
25		4	4	( 8.9)
26	2		2	( 4.4)
27	1	1	2	( 4.4)
28	2	2	4	( 8.9)
29	2	2	4	( 8.9)
30	5	2	7	(15.8)
31	3		3	( 6.7)
32	6	3	9	(20.0)
33	1		1	( 2.2)
34	1		1	( 2.2)
35	1	1	2	( 4.4)
36	1	1	2	( 4.4)
37				
38				
39	1		1	( 2.2)
Totals	29	16	45	(100 )

The majority of clinical experiences occurred in the medical-surgical and orthopedic patient-care units of general hospitals. Three programs indicated that they included specific rehabilitation content during this block of instruction, and seven said they integrated this content throughout the total curriculum. Among programs, it was the usual practice to also provide learnings related to the administration of medications during this time. Six of the ten programs which indicated they offered specific content in first aid and disaster nursing included it in this area; the other four taught this content during the basic phase.

Care of Children (pediatrics): Learning experiences generally include those related to the care of persons older than newborns (up to two weeks of age) and not yet young adults. With one exception, a program which used a children's hospital, all programs utilized the pediatric area of a general hospital to provide experiences in the care of sick children.

Twenty-eight programs indicated that they provided experiences with well children. In 20, this was an observational experience only; in eight, the students were actively involved with the children. These experiences occurred predominately in this area but in a few programs they were included in the basic phase in conjunction with content on human growth and development.

Care of Mothers and Newborns (obstetrics): The general learnings included the pre- and post-partum care of mothers, with clinical experience obtained in an obstetrical unit in general hospitals; and the care of newborns, including practice in a nursery in the same obstetrical unit. See the "special learnings experiences" portion of this report for additional experiences related to this area.

Care of the Aged (geriatrics): Clinical experiences were obtained in nursing homes and/or geriatric units in a general hospital, though the portion of the report dealing with affiliating agencies, which follows, shows that these occurred predominately in nursing homes.

Care of the Mentally Ill (psychiatrics): Among the 12 programs which included this area, clinical experiences were predominately provided in a psychiatric hospital, per se, while others utilized psychiatric units of general hospitals.

#### Special Learning Experiences

For purposes of this study, "special areas" are defined as those other than the commonly utilized medical, surgical, obstetrics and pediatrics patient-care areas. They are 14 in number:

- |                           |                            |
|---------------------------|----------------------------|
| (1) Central Supply        | (8) Physical Therapy Dept. |
| (2) Diet Kitchen          | (9) X-ray Dept.            |
| (3) Clinical Laboratories | (10) Pre-partum            |
| (4) Operating Room        | (11) Labor Room            |
| (5) Recovery Room         | (12) Delivery Room         |
| (6) Intensive Care Unit   | (13) Formula Room          |
| (7) Emergency Room        | (14) Public Health Agency  |

Among the 44 programs for which this information is known, the degree of utilization of these 14 special areas varied from an observational experience only (in area two days or less) to a four week block of actual clinical experience. Observational and clinical experiences in special areas (1) through (9) occurred most frequently as rotations within the medical-surgical block of instruction, and in (10) through (13), within the obstetrics block. While observational experiences occurred in (14), a public health agency, from very early in the basic phase to late in the advanced phase, actual clinical experiences in these agencies occurred in the 33rd or 39th weeks.

There were no significant differences, among public and private programs, in the number and types of special learning experiences provided. All 44 programs provided an observational and/or a clinical experience in at least two of these special areas, one in as many as 12;

the number of special areas utilized by the greatest number of programs (12) was five. See Table 6.12.

Table 6.12

NUMBER OF 14 SPECIAL AREAS UTILIZED  
FOR OBSERVATIONS OR CLINICAL EXPERIENCES

Special Areas	Programs	
	Number	Percent
2	1	( 2.3)
3	5	(11.4)
4	4	( 9.0)
5	12	(27.2)
6	9	(20.4)
7	7	(15.9)
8	2	( 4.6)
9	1	( 2.3)
10		
11	2	( 4.6)
12	1	( 2.3)
13		
14		
14	44	(100 )

Among these 14 special areas, two programs provided no observational experiences and one provided as many as 11; twelve provided no clinical experiences. The maximum number of areas in which a program provided clinical experiences was seven. See Table 6.13.

The operating room and recovery room were the only special areas in which at least one-half of the 44 programs provided an observational experience. Additional areas in which at least one-fourth of them provided an observational experience were, in order of frequency: delivery room, labor room, and central supply.

The only area in which at least one-half (61.4%) of the programs offered a specific block of clinical experience was the labor room. At least one-fourth of them offered clinical experiences, in order of frequency, in the delivery room and the recovery room. Table 6.15 shows the number and percent of the 44 programs which offered an observation or clinical experience in each of the 14 special areas.

The degree of inclusion of observational and clinical experiences in these 14 special areas varied among the two states. Thirty-eight per cent of the Iowa programs and 25% of the Illinois programs provided only observational experiences. Experiences in 19% of the programs in Iowa and 32% in Illinois were predominately observational; 31% in Iowa and 43% in Illinois, predominately clinical; and 12.5% in Iowa and none in Illinois provided an equal number of observational experiences and clinical experiences.

Table 6.13

NUMBER AND TYPES OF EXPERIENCES  
PROVIDED IN 14 SPECIAL AREAS

Number of Special Areas	Number of Programs			
	Observation Only		Clinical Experience	
	#	%	#	%
0	2	( 4.6)	12	(27.2)
1	8	(18.1)	7	(15.9)
2	8	(18.1)	7	(15.9)
3	5	(11.4)	5	(11.4)
4	4	( 9.0)	4	( 9.0)
5	11	(25.0)	6	(13.7)
6	3	( 6.9)	2	( 4.6)
7	1	( 2.3)	1	( 2.3)
8	1	( 2.3)		
9				
10				
11	1	( 2.3)		
Totals	44	(100 )	44	(100 )

Among the 44 programs, the highest per cent (39%) provided both types of experiences, predominately clinical. Thirty per cent provided observational experiences only, 27% showed that experiences were predominately observational, and 5% of the programs reported they provided an equal number of each type. See Table 6.14.

Table 6.14

TYPES OF EXPERIENCES PROVIDED IN 14 SPECIAL AREAS

Type of Experience	Programs					
	Illinois		Iowa		Combined	
	#	%	#	%	#	%
Observation only	7	(25.0)	6	(37.5)	13	(29.5)
Predominately observations	9	(32.1)	3	(18.8)	12	(27.3)
Predominately Clinical Experiences	12	(42.9)	5	(31.2)	17	(38.7)
Equally observations & clinical experiences	-	-	2	(12.5)	2	( 4.5)
Totals	28	(100 )	16	(100 )	44	(100 )

Table 6.15

## OBSERVATIONAL AND CLINICAL EXPERIENCES IN SPECIAL AREAS

Special Areas of Learning	Observation Only (2 days or less)		Clinical Experience (3 days or more)		Length of Clinical Experience by (# of Progs.)		
	Ill. Progs. (28)	Iowa Comb. Progs. (16)	% of Progs. (44)	Ill. Progs. (28)		Iowa Comb. Progs. (16)	% of Progs. (44)
(1) Central Supply	11	3	14 (31.8)	6	6	(13.7)	1 wk.(4); 2 wks.(2)
(2) Diet Kitchen	9	1	10 (22.7)	2	2	( 4.6)	1 wk.(2)
(3) Clinical Labs.	5	3	8 (18.1)				
(4) Operating Room	16	11	27 (61.4)	4	4	( 9.0)	1 wk.(2); 3 wks.(1); 4 wks.(1)
(5) Recovery Room	13	9	22 (50.0)	12	2	(31.8)	1 wk.(13); 2 wks.(1)
(6) Intensive Care Unit	6	3	9 (20.4)	7	7	(15.9)	1 wk.(6); 2 wks.(1)
(7) Emergency Room	3	1	4 ( 9.0)	6	6	(13.7)	1 wk.(5); 2 wks.(1)
(8) Phys.Ther.Dept.	3		3 ( 6.9)	1	2	( 4.6)	1 wk.(1); 2 wks.(1)
(9) X-ray Dept.	2		2 ( 4.6)				
(10) Pre-partum	1	2	3 ( 6.9)		2	( 4.6)	1 wk.(2)
(11) Labor Room	9	8	17 (38.6)	19	8	(61.4)	1 wk.(23); 2 wks.(4) often comb. with del. rm. exp.
(12) Delivery Room	13	8	21 (47.7)	13	7	(45.4)	1 wk.(18); 2 wks.(2) often comb. with labor rm. exp.
(13) Formula Room	3	2	5 (11.4)	3	3	(13.7)	1 wk.(6) comb. with nur- sery exp.
(14) Public Hlth.Agency	5	5	10 (22.7)	1	1	( 4.6)	1 wk.(2)

1 wk. (4); 2 wks. (2)  
1 wk. (2)  
1 wk. (2); 3 wks. (1); 4 wks. (1)  
1 wk. (13); 2 wks. (1)  
1 wk. (6); 2 wks. (1)  
1 wk. (5); 2 wks. (1)  
1 wk. (1); 2 wks. (1)  
1 wk. (2)  
1 wk. (23); 2 wks. (4) often  
comb. with del. rm. exp.  
1 wk. (18); 2 wks. (2) often  
comb. with labor rm. exp.  
1 wk. (6) comb. with nur-  
sery exp.  
1 wk. (2)



## Weeks of Clinical Experience in Each Area of Instruction

Care of Adults (medical-surgical): One program provided a total of 13 weeks experience in this area; in conjunction with the Fundamentals of Nursing course, taught during the basic phase and in the four weeks at the beginning of the advanced phase. Clinical experiences during these latter four weeks were confined to the operating room. Among the remaining 44 programs, the number of weeks spent in this area ranged from 10 to 26.

Care of Children (pediatrics): One program scheduled as few as three weeks; one, as many as eight. The length among the other 43 varied between four and six, predominately five.

Care of Mothers and Newborns (obstetrics): The minimum was four weeks, scheduled by nine programs; the maximum was 10, scheduled by one. Over two-thirds of all programs planned either five or six weeks.

Care of the Aged (geriatrics): Thirty-two (71%) of the 45 programs planned learnings specifically in geriatrics, rather than including them in the area of care of adults. Among these 32, the number of weeks ranged from two to 16; most commonly, four to six.

Care of the Mentally Ill (psychiatrics): Only twelve (27%) of the programs provided clinical experience in this area. Among these 12, the number of weeks ranged from two to six; one-half (six programs) planned a block of six weeks.

Table 6.16 shows the length of time, in weeks, that programs devoted to clinical experience in each of the above five areas of instruction.

## Patterns of Student Clinical Rotations Through The Five General Areas

In thirty-nine of the 45 programs, the first block of instruction was the care of adults and/or the aged: nine of these 39 planned experiences specifically in geriatric settings. The first block in five programs was the care of mothers and newborns and in one, the care of children.

The second block showed that the great majority (29) of the programs offered either care of children or care of mothers and newborns; and the same can be said of the third block, since the usual pattern was for students to rotate directly from one of these two areas to the other.

Programs other than the nine which offered care of the aged, per se, in the first block, offered this predominately either in the fourth or fifth block. The same was true of eight of the 12 programs which provided clinical experience in the care of the mentally ill. Two of the remaining four offered this in the second block, and two in the third.

Table 6.16

## NUMBER OF WEEKS IN EACH CLINICAL AREA

# of Weeks	Clinical Areas				
	Med.-Surg.	Pediatrics	Obstetrics	Geriatrics	Psychiatrics
1					
2				1	2
3		1		2	1
4	1 (O.R. only)	15	9	11	6
5		17	14	7	1
6		11	17	4	2
7			2	2	
8		1	2	1	
9					
10	2		1	2	
11					
12	7			1	
13	1				
14	6				
15	1				
16	5			1	
17	3				
18	6				
19	6				
20	2				
21	2				
22	1				
23	1				
24					
25					
26	1				
# of Progs.	45	45	45	32	12

The sequence of areas of instruction in the advanced phase varied considerably among the 45 programs. While the care of adults (medical-surgical) area was predominately the first in the sequence (in 29 programs), beyond this point there was such variance that no one typical or dominant sequence was discernible.

Days of 6 - 11 P.M. and 11 P.M. - 7 A.M. Clinical Experience During the Year

6 - 11 P.M.

Thirty-three (73.6%) of the 45 programs had no days with clinical experiences during these hours. One had two days; six had five days; three, ten days; and the greatest number of days (15) were scheduled by two private programs.

Among the 33 programs which did not include a 6 - 11 experience, the reasons given were: "lack of sufficient faculty to supervise students during these hours" and "there were adequate and appropriate learning experiences available during daytime hours." Those programs which did include the 6 - 11 experience did so because: "experiences in p.m. care and admitting patients were more available" and "students are able to have a better experience in comprehensive in-patient care."

#### 11 P.M. - 7 A.M.

Forty (89%) of the programs had no days with clinical experiences during these hours. One had two days; and four, five days. The latter four were two public and two private programs. Insufficient faculty to provide supervision of students was the primary reason given for omitting experiences between these hours. Among those who included experiences during this time, their primary reason for doing so was "additional learning experiences." Table 6.17 shows the degree to which programs utilized the two above time periods for clinical experiences.

Table 6.17

#### NUMBER OF DAYS OF CLINICAL EXPERIENCE 6 - 11 P.M., 11 P.M. - 7 A.M.

Number of Days	6 P.M. - 11 P.M.				11 P.M. - 7 A.M.			
	Ill.	Iowa	Combined	%	Ill.	Iowa	Combined	%
0	21	12	33	(73.6)	25	15	40	(89.0)
1								
2	1 (pub)		1	( 2.2)	1 (pub)		1	( 2.2)
3								
4								
5	5 (pub.)	1 (pub)	6	(13.2)	3 (2 pub)	1 (pvt.)	4	( 8.8)
10	2 (1 pub) (1 pvt)	1 (pub)	3	( 6.6)				
15		2 (pvt)	2	( 4.4)				
Totals	29	16	45	(100 )	29	16	45	(100 )

#### Compensation Given Students by Affiliating Clinical Agencies

Students in 25 (55.5%) of the 45 programs received compensation of cash, laundry of uniforms, meals and/or housing. In 18 public programs they received a meal when their hours of assignment in the clinical areas coincided with a mealtime; in two private programs they received all meals. Students in two programs received cash, and two programs provided laundry of uniforms. Only one, a private program, provided housing. Students in twenty (45.5%) of the programs received no compensation of any kind. See Table 6.18.

Table 6.18

**TYPE OF COMPENSATION GIVEN STUDENTS BY  
AFFILIATING CLINICAL AGENCIES**

Type of Compensation	Illinois Programs	Iowa Programs	Combined Programs
Cash	2 (pub)	0	2
Laundry of uniforms	1 (pvt)	1 (pvt)	2
Meals	17 (1 pvt) (16 pub)	3 (1 pvt) (2 pub)	20
Housing	0	1 (pvt)	1
Totals	20 (69% of progs.)	5 (31.3% of progs.)	25 (55.5% of all progs.)

#### Scheduled Transition Period

Several programs specifically showed in their curriculum sequence that they planned a transition period of from one to three weeks near the end of the year. During this time, their students were in clinical areas, often of their choice, for approximately forty hours per week; they were responsible to nursing service personnel, with only long-range supervision by faculty. The purpose of this experience was to simulate the employment situation and to assist the student to adjust to it. At all times, ready contact between nursing service personnel and faculty was possible.

#### Final Review Period

The majority of programs indicated they planned at least a portion of the final week to allow for students to be with faculty to broadly review the curriculum prior to sitting for state board licensure examinations.

#### Affiliating Agencies Utilized

The number and types of agencies which cooperated with each educational program by providing areas for student clinical learnings varied among programs and were determined by factors such as: administrative control of the program (some were hospital based with clinical areas immediately available), size of criterion class, the relationship between kinds and time of planned experiences and the availability of clinical areas for student use, etc. Not all students in the same program had experiences in the same clinical setting. By faculty choice or by necessity, it was not unusual for groups of students within a criterion class to be simultaneously in different affiliating agencies but receiving similar learnings.

#### Number

The 45 programs used 199 affiliating agencies, 61 in Iowa and 138 in Illinois. The mean number for the 16 Iowa programs was 3.8 and for the 29 in Illinois, 4.8. Since there was no marked difference in criterion

class sizes among the two states, the higher mean for Illinois could reflect its larger number of programs which admit multiple classes per year and its more sizable communities which have more numerous health care facilities available. Two of the 45 programs used only one agency, and one used as many as 12. The number most commonly used by a program was two; and then, in order by frequency of number used, four, five, six, three, seven and ten were each used by two programs, and nine agencies were used by one. See Table 6.19.

Table 6.19

No. of Agencies	NUMBER OF AFFILIATING AGENCIES UTILIZED			
	Programs			%
	Illinois	Iowa	Combined	
1	1	1	2	( 4.4)
2	6	4	10	(22.2)
3	3	2	5	(11.1)
4	4	5	9	(20.0)
5	5	2	7	(15.7)
6	5	1	6	(13.4)
7	2		2	( 4.4)
8				
9	1		1	( 2.2)
10	1	1	2	( 4.4)
11				
12	1		1	( 2.2)
Totals	29	16	45	(100 )

#### Types

Of the 199, 109 (54.8%) were general hospitals, 42 (21.1%) were nursing homes, 14 (7%) were psychiatric hospitals, and the remaining 34 (17.1%) included public health agencies, clinics, specialized hospitals, and schools for well or handicapped children.

All programs used at least one general hospital. No other type of affiliating agency was used by all programs. The second most commonly utilized was the nursing home; 27 programs used 42 of these. Eleven programs each used a psychiatric hospital for experience in the care of the mentally ill and a nursery or elementary school for student experiences related to the well child. Thirteen mentally retarded or handicapped agencies were utilized by 10 programs; and, four, three, and two respectively used doctors' offices or a clinic, public health agencies and specialized hospitals. The latter were specialized in the fields of tuberculosis and children's diseases. See Table 6.20.



Table 6.20

**NUMBER AND TYPES OF AFFILIATED  
AGENCIES UTILIZED**

Type Affiliating Agency	Total Number Utilized				Number of Programs Utilizing Each			
	Ill.		Iowa		Ill.		Iowa	
			bined	%			bined	% of Programs
General Hospital	80	29	109	(54.8)	29	16	45	(100 )
Nursing Home	25	17	42	(21.1)	18	9	27	(60.0)
Psych. Hospital	12	2	14	( 7.0)	9	2	11	(24.4)
Mentally Retarded and Handicapped	8	5	13	( 6.6)	5	5	10	(22.2)
Nursery School (or Elem. Sch.)	8	4	12	( 6.0)	7	4	11	(24.4)
Doctor's office or clinic	1	3	4	( 2.0)	1	3	4	( 8.9)
Public Hlth. Agency	2	1	3	( 1.5)	2	1	3	( 6.7)
Specialized Hosp.	2		2	( 1.0)	2		2	( 4.4)
Totals	138	61	199	(100 )				

#### Administrative Control

Among the 199 affiliating agencies, 102 (51.3%) were public agencies, including two Veterans Administration hospitals; 67 (33.6%) were church-controlled; and 30 (15.1%) were private, non-church agencies.

#### Bed Size of 168 In-service Patient-Care Agencies

General hospitals (109): Three programs used general hospitals of 26-49 bed size and 11 used those with 500 beds or more. The most common size used in Illinois was 200-299 (23 programs); and in Iowa, 100-149, used by eight programs.

Nursing homes (42): All programs in Iowa and 26 in Illinois used nursing homes. Four programs used nursing homes with 26-49 beds; the largest affiliating nursing homes (200-299 bed size) were utilized by eight programs. The most common size, used by 14 programs, was 50-99. Again, the data reflect the availability of larger homes in Illinois.

Psychiatric hospitals (14): Two programs in Iowa used agencies of 50-99 bed size. The remaining twelve of these agencies were all used by Illinois programs and ranged in size from 26-49 to 500 or more beds.

Specialized hospitals (2) and Rehabilitation Center (1): A 100-149 bed tuberculosis hospital, a 300-399 bed childrens hospital and a rehabilitation center of 400-499 beds were all used by Illinois programs.

Since Illinois is the more urban of the two states, the greater bed-size ranges for each type of affiliating agency in that State are not unexpected for its communities are less uniform in size than are those in Iowa.

#### Distance from Program

One-hundred and forty eight affiliating agencies (74.4%) were located in the same city. The 39 (19.6%) which were outside the city but not over 25 miles included 20 general hospitals, 12 nursing homes, three psychiatric hospitals, one nursery school, two centers for handicapped, and one public health agency. The 12 (6.0%) which were over 25 miles from the program included six general hospitals, two nursing homes, one psychiatric hospital, one nursery school and two centers for handicapped. Only one was over 50 miles, a general hospital 53 miles distant.

Detailed data on the 199 affiliating agencies, including type, administrative control, bed size, and distance from program, is shown in Table 6.21 on pages 85 and 86.

Table 6.21

**AFFILIATING AGENCIES, BY ADMINISTRATIVE CONTROL,  
TYPE, BED SIZE AND DISTANCE FROM PROGRAM**

Affiliating Agency	Num-ber Util-ized	Not Appli-cable	Bed Size							Distance from Program			
			26-49	50-99	100-149	150-199	200-299	300-399	400-499	500 or Above	Same City	<25 mi.	>25 mi.
<u>PUBLIC:</u>													
General Hospital	50		I11. 2 Ia. 2	I11. 7 Ia. 2	I11. 4 Ia. 3	I11. 4	I11.13 Ia. 2	I11. 3	I11. 4	I11. 5 Ia. 1	I11.27 Ia. 8	I1.11	I11.4*
Nursing Home	16		I11. 1	I11. 2	I11. 3	I11. 4	I11. 5 Ia. 1				I11. 7	I11. 8 Ia. 1	
Psychiatric Hospital	9			I11. 1 Ia. 2			I11. 1			I11. 5	I11. 5 Ia. 2	I11. 1	I11. 1
Spec. Hosp. (other than Psychiatric)	2				I11. 1			I11. 1			I11. 2		
Nursery or Elem. School	8	I11. 6 Ia. 2									I11. 5 Ia. 2	I11. 1	
Ment.Retarded or Handi- capped	13	I11. 7 Ia. 5							I11. 1		I11. 4 Ia. 5	I11. 2	I11. 2
Public Health Agency	3	I11. 2 Ia. 2									I11. 1 Ia. 1	I11. 1	
Clinic	1	Ia. 1									Ia. 1		
Sub-Total	102	24	3	14	11	8	22	4	5	11	70	25	7

\*one 53 mi.

(continued)

(continued)

Affiliating Agency	Num-ber Util-ized	Not Appli-cable	Bed Size							Distance from Program		
			26-49	50-99	100-149	150-199	200-299	300-399	400-499	500 or Above	Same City	<25 mi. >25 mi.
CHURCH:												
General Hospital	55		I11. 1 Ia. 3	I11. 1 Ia. 3	I11. 5 Ia. 4	I11. 8 Ia. 1	I11.10 Ia. 4	I11. 7 Ia. 4	Ia. 2	I11. 5	I11.27 Ia. 18	I11. 8 I11. 2
Nursing Home	10		Ia. 1	Ia. 2	I11. 2 Ia. 2	I11. 1 Ia. 1	I11. 1				I11. 3 Ia. 6	I11. 1
Nursing School	2	I11. 1 Ia. 1									I11. 1 Ia. 1	
Sub-total	67	2	2	6	13	11	15	11	2	5	56	9 2

## PRIVATE (NON-CHURCH):

General Hospital	4				I11. 1 Ia. 1		Ia. 1	I11. 1			I11. 1 Ia. 2	I11. 1
Nursing Home	16		Ia. 2	I11. 5 Ia. 5	Ia. 2	I11. 1	Ia. 1				I11. 2 Ia. 10	I11. 2 I11. 2
Psychiatric Hospital	5		I11. 1	I11. 4							I11. 3	I11. 2
Nursery School	2	I11. 1 Ia. 1									Ia. 1	I11. 1
Clinic (M.D. Off.)	3	I11. 1 Ia. 2									I11. 1 Ia. 2	
Sub-total	30	5	3	14	4	1	2	1			22	5 3
GRAND TOTAL	199	31	8	34	28	20	39	16	7	16	148	39 12

## CHAPTER 7

### HOW FACULTY MEMBERS VIEW THE PERFORMANCE OF NURSING FUNCTIONS

This chapter reports data collected through the card sort technique for which the description and rationale were described in the Final Report - Part I, Occupational Patterns and Functions of Employed LPN's, by Robert M. Tomlinson, et al (Chapter 5, page 105). Findings reported in Part I included the results of card sorts completed by three groups: (1) 688 employed LPNs, (2) 129 RN immediate supervisors of 129 of the 688 employed LPNs, and (3) 123 nurse aides who worked with 123 of the 688 employed LPNs.

The portion of the study reported in this Chapter of Part II is based on the same card sort methodology, utilized with a fourth and final group; 245 registered nurse faculty members in the 45 programs studied. It includes: (1) a brief description of the card sort techniques used in this study; (2) findings of the sorts done by faculty members; and, (3) selected comparisons among the results of the sorts done by the four groups.

#### DEVELOPMENT OF FUNCTION STATEMENTS USED IN CARD SORTS

A review of previous studies resulted in the identification of a list of approximately 350 different functions performed by licensed practical nurses. A group of professional nurse educators in programs in practical nursing was employed to combine, eliminate, and/or supplement the functions on the original list. The efforts of these educators resulted in approximately 200 function statements worded for consistency. Nursing and non-nursing personnel then reviewed the 200 statements to appraise, revise, check for face validity, grammatical consistency and specificity. Through this process the total number of function statements was reduced to 120. At this point it was decided to use 99 function statements in order to facilitate coding and machine analysis.

To determine the 99 statements to be used, the 120 statements were individually reproduced on 2 1/2" x 4" cards and used in field trials with educators in programs in practical nursing, employed licensed practical nurses, and registered nurses. Each respondent was asked to review all statements for clarity, comprehensiveness, appropriateness, and meaningfulness. Prior to a discussion of their reactions to the statements, each was asked to sort the cards on the criterion of importance in his own specific position (if employed as an LPN), or when not an LPN, through assuming that role. Information from these field trials was reviewed and the functions were refined and reduced to 99 in number. The reader is referred to a list of these function statements in Appendix B since the remainder of this report will often refer to them by number only.



During the card sorts done by employed LPNs and their RN supervisors, some nurses in surgical areas commented on the inadequacy of statements pertaining to surgical nursing procedures. Therefore, for the faculty member group, two statements, 14 and 36, were replaced by statements relating to the surgical area. Both the original statements and their replacements are shown in Appendix B.

These same 99 function statements were used with faculty members for two purposes: (1) determination of their view of the LPN's level of responsibility while performing each function, and (2) the degree of emphasis given each function in the educational program.

## SECTION 1: RESPONSIBILITY SORT

### PROCEDURE

During the interview with each coordinator, as described in Chapter 2, research team leaders obtained information on each staff member, including hospital-paid clinical instructors. Each coordinator and instructor was then assigned an identification number and the clinical area to be used as a basis on which to complete the responsibility sort. The clinical area assigned was in accordance with a pre-determined priority established by the research staff. This was necessary in order to assure coverage of functions in as many of the major clinical areas as possible. Clinical area assignments were made in the following order of priority:

- |  |   |
|--|---|
| First Priority                               | 1. Medical-Surgical<br>2. Geriatrics - nursing home<br>3. Obstetrics and Gynecology<br>4. General Duty - small hospital - clinical areas in addition to Medical-Surgical<br>. . . . . |
| Second Priority -<br>Select most appropriate | 5. Pediatrics<br>6. Psychiatrics<br>7. Medical<br>8. Surgery<br>9. Operating Room<br>. . . . .  |
| Third Priority                               | 10. If 5 through 9 were not appropriate, repeat Medical-Surgical  |

An attempt was made to assign the instructor to the clinical area related to curriculum content area she taught. However, the coordinator was generally assigned to the Medical-Surgical area.

The clinical area to be used as a basis of sorting was assigned so that assurance was had that a faculty member familiar with the amount of emphasis given in each specialty area would be included in the sort results.

The coordinator and full- and part-time instructors for each criterion class were then given a brief description of the deck of cards and informed that: (1) the statements were developed to be a sample of all possible

functions; (2) in order to determine the actual range of functions performed, the function statements were purposefully structured to encompass those of a level both above and below those usually performed by the LPN; and, (3) the assumption was to be made that in all cases where a doctor's order would be required, it was properly recorded.

Faculty members were first instructed to sort the 99 functions according to the relative level of responsibility for the performance of each function that they would expect their graduates to have one year after completing the program. Each faculty member was given both the deck of 99 nursing function statements (one card for each function) and a 9" x 12" poster board. Four rectangles were outlined on the poster board. Each rectangle denoted one of four levels of responsibility at which their graduates could be expected to perform each function one year after graduation. Each function statement was to be placed on one of the rectangles according to the following categories:

- (1) Independent responsibility - will perform this function independently with full responsibility for its performance.
- (2) Shared responsibility - will perform this function independently but with someone else (probably his immediate supervisor) sharing the responsibility for its performance.
- (3) Direct supervision - will perform this function but only under direct supervision.
- (4) Never perform - will never perform this function.

Each nurse faculty member was to: (1) review each function statement; (2) check it carefully for conditions of the statement and for the use of such words as and, or, and such as; before placing it in a rectangle. No limitations were made on the number of statements that could be placed in each category.

Faculty members appeared to be far more uneasy in determining the responsibility level for the performance of functions than were the employed LPNs and their RN supervisors. Perhaps this was because they were instructed to sort the functions according to what they expected their graduates actually would be doing one year after graduation, not what they expected they should be doing.

A member of the research team was available while the faculty member reviewed and placed the first few cards. As noted above, the initial reaction of the faculty member to the placement of the function statements was often one of concern, sometimes apprehension. At this point the researcher reassured him that there were no "right" or "wrong" answers; rather, he was to sort according to how he anticipated the expected levels of responsibility would be. If further clarification of the categories were requested, it was given from the following previously developed standard responses:

1. Independent responsibility - "Actions of this type include those situations where the practical nurse makes an observation during his normal duties and/or takes appropriate action without checking with, or getting additional instructions from, some person prepared at a higher level. Another situation would be where standard instructions or specific instructions were recorded on the patient's chart and he would take the action "on his own" in carrying out the instructions from the chart. It might or might not include a recording of his action."
2. Shared responsibility - "Actions of this type include those where there is some intervening activity by a supervisor or other responsible person, e.g., where verbal instructions by a supervisor were given to perform an action where it would not be necessary to report back to the supervisor upon completion of the action. The fact that another person has taken some action relating to the performance at the time of the performance gives them a part of the responsibility."
3. Direct supervision - "Actions of this type include those where the practical nurse is given a specific instruction to perform an action and report back immediately following, assists a higher level person with the action, or performs the action under observation."
4. Never perform - "The graduate would never perform this function. This is not likely to occur in his particular situation and if it did, he would not perform it even though he may have been prepared to do it and may have performed it in another area of assignment."

Upon completion of the responsibility sort, a final check was made to see that each of the 99 cards had been placed in one of the four categories and the interviewer then recorded the classification of each function statement by category number.

#### ANALYSIS OF RESPONSIBILITY SORT

Table 7.1 shows the number of functions, at each level of responsibility, which the 245 faculty members saw their graduates performing one year after graduation. The overall results of the responsibility sorts are shown in the last four columns of Table 1, Appendix C.

Among the 99 functions, the mean number of functions which would be performed with individual responsibility was 41.1; shared responsibility, 20.1; direct responsibility, 11.2; and would never be performed, 26.6. This indicates that the mean number of functions which the faculty felt their graduates would perform with some amount of responsibility was 73.4. Standard deviations show there was considerable variation in how faculty members saw their graduates functioning. Of particular note is that of the 99 functions, at least one faculty member indicated that none would be performed independently, and at least one indicated that 73 would be performed independently.

TABLE 7.1

NUMBER OF FUNCTIONS TO BE PERFORMED BY RESPONSIBILITY  
LEVEL, AS VIEWED BY 245 FACULTY MEMBERS

	Individual	Shared	Direct	Never
Mean	41.1	20.1	11.2	26.6
Standard Deviation	10.5	9.8	7.9	9.6
15th Centile <sup>1</sup>	31 or less	11 or less	4 or less	15 or less
Median <sup>2</sup>	41	19	10	26
85th Centile <sup>3</sup>	52 or more	30 or more	19 or more	36 or more
Range	0 to 73	2 to 60	0 to 47	7 to 68

<sup>1</sup>Number of functions specified by the 15% of the faculty members who specified the least number of functions.

<sup>2</sup>Number of functions specified by the mid person in the respective category.

<sup>3</sup>Number of functions specified by the 15% of the faculty members who specified the greatest number of functions.

Table 7.2 on the following page, shows a rank order of the top 20 functions, determined according to frequency, for each responsibility level.

#### Independent Responsibility

The 245 faculty members showed a high degree of agreement on what functions would be performed independently by graduates. Among the 20 functions most frequently placed in the "independent" category, even the twentieth ranked function was agreed upon by 80% of the faculty members. These top 20 functions were essentially basic nursing care activities; i.e. 68 - "Make occupied or unoccupied beds," 55 - "Prepare and position patient to eat," 53 - "Obtain temperature, pulse, and respiration," and 29 - "Bathe patient or help patient to bathe (in bed, tub, shower)." Therefore, these findings are not surprising in that most LPNs are likely to perform these basic nursing functions regardless of clinical area in which employed.



TABLE 7.2

**RANK ORDER OF TOP 20 FUNCTIONS  
BY LEVEL OF RESPONSIBILITY**

Independent			Shared Responsibility			Direct Supervision			Never		
Function	N	%	Rank	Function	N	%	Rank	Function	N	%	Rank
68*	240	97.9	1	49*	111	45.3	1	75	98	40.0	1
55*	237	96.7	2	81*	109	44.5	2	76*-	89	36.3	2
53*	233	95.1	3	94	107	43.7	3	46*	87	35.5	3
29*	232	94.7	4	45	99	40.4	4	65-	77	31.4	5.5
31	228	93.1	5	17	98	40.0	5.5	72	77	31.4	5.5
66*	226	92.2	6	73	98	40.0	5.5	80	77	31.4	5.5
56*	225	91.8	7.5	99	97	39.6	7	43	77	31.4	5.5
2	225	91.8	7.5	83	96	39.2	8.5	88	76	31.0	8
98*	223	95.9	9	35	96	39.2	8.5	97	74	30.2	9
26	220	89.8	10	52	95	38.8	10	99	73	29.8	10.5
87*	220	89.8	11	33*	94	38.4	11	3	73	29.8	10.5
90	219	89.4	12	85	91	37.1	12	45	68	27.8	12
4	211	86.1	13	59	90	36.7	13	60	66	26.9	13
41	210	91.4	14	25*	88	35.9	14	10	65	26.5	14
9	205	83.7	15	96	87	35.5	15.5	61-	60	24.5	15.5
48*	204	83.3	16	42	87	35.5	15.5	84	60	24.5	15.5
77	203	82.9	17	86	86	35.1	17	91-	59	24.1	17
36*	202	82.4	18	19	83	33.9	18.5	79-	57	23.3	18
74*	200	81.6	19	14	83	33.9	18.5	12-	55	22.4	19
89	197	80.4	20	5	80	32.7	20	92-	54	22.0	20
MEAN	207	89.9		93	38.3				68	29.1	
									181	74.1	

N Number of the total in the reference group who reported specified level of responsibility.

\* These functions will also be found among the top 20 functions ranked according to the emphasis placed on them in the education program. See Table

- These functions will also be found among the top 20 functions ranked according to the number of negative emphasis responses given in the emphasis sort. See Table



## Shared Responsibility

Among the 245 faculty members there was much less agreement in ranking "shared responsibility" functions than in ranking "independent" functions. The top 20 functions performed with "shared responsibility" were agreed upon by only 38% of the faculty as compared with their 90% agreement in the "independent responsibility" category. Examples of the type of functions rated high on "shared responsibility" were: 49 - "Pour and give medication," 81 - "Give intramuscular injections," 94 - "Instill medication for the eye, ear, or nose," and 45 - "Assist during thoracentesis and lumbar puncture."

## Direct Supervision

The degree of agreement on the top 20 functions in the "direct supervision" category was somewhat lower than that for "shared responsibility" and considerably lower than that for "independent" or "never performed." Functions highly ranked in this category of "direct supervision" include: 75 - "Set up equipment for aseptic surgical procedures....", 76 - "Compute fractional doses of medicine," 46 - "Apply tourniquet to extremity for control of hemorrhage," and 65 - "Regulate flow of blood transfusions."

## Never

As with those functions ranked high in the top 20 on "independent responsibility," the top 20 in the "never" category also show a high degree of agreement. An average of 74% of the 245 faculty members agreed on the top 20 functions in this "never" category. Functions exemplary of those ranked high in this category were: 1 - "Take x-ray pictures," 30 - "Employ or discharge personnel....," 22 - "Start an I.V. solution," 11 - "Perform a complete urinalysis....," and 24 - "Take an electrocardiograph recording of a patient." Since functions found in the "never" category are often of a more specialized nature, and therefore likely to be performed by a relatively small number of LPNs, it is not surprising that in this category there was a high degree of agreement among faculty members.

## RESPONSIBILITY LEVEL, BY TYPE OF CLINICAL AREA

As noted earlier, each faculty member performed the sort with particular reference to a specified type of clinical area. While nine types of clinical areas were originally identified, the number was later reduced to six in order to facilitate analysis. The medical area and the surgical area were combined with medical-surgical, and no sorts were done with reference to the operating room area. This left the psychiatric category, sorted on by only four faculty members, but it was felt that to combine this clinical area with any other would be inappropriate.

In comparing the level of responsibility that faculty members assigned each function, by type of clinical area, little difference between areas was found. For those functions where notable differences did occur, this was expected due to the nature of the clinical area. Among clinical area types, the geriatric area was seen by faculty members as the one in which



Because it was anticipated that some of the functions would be emphasized as not to be performed by LPNs, faculty members were given the opportunity to indicate whether a function was given positive or negative emphasis.

The emphasis board, 12" x 48" in size, contained 99 pockets arranged as shown in Figure 7.1. "Most Emphasis" was printed on the left side of the board, and "Least Emphasis" on the right. When a card was placed in the pocket, the statement itself extended above the top of the pocket and could be viewed after placement. The number of cards to be placed in each column, or rank, was printed at the bottom of each column.

Instructions given faculty members were:

"We would like you to place the three functions given the most emphasis in the three pockets of the "most emphasis" column on the left side. Then proceed to select the five statements that are given the next most emphasis and place them in the five pockets of the next column on the left, and continue throughout the total of the cards and columns. There is a pocket for each card. You may re-arrange the cards at any time until you are satisfied with their placement. Also, it does not make any difference in the order of the cards within any one column. In each case, you are making the decision that the functions in a column to the left are given more emphasis than the ones in the next column to the right.

"You may find it easier after you have sorted the "most emphasis" columns to then make your decisions about those statements to be placed in the "least emphasis" column. After you have filled in the "most emphasis" and the "least emphasis" columns, you will find that more statements can go in each of the center columns. (In most cases, the interviewee made several piles by relative emphasis from each of the original responsibility sort piles. Most proceeded by determining the functions given the most emphasis and working through the independent responsibility cards. If she had difficulty making choices for the "most emphasis" end of the distribution, it was again suggested that she might find it easier to start with the "least emphasis" and work back toward the center.)

"Some functions may be given a negative emphasis in your curriculum; that is, an emphasis that this particular task is not to be performed by LPNs. You are to place such function statements in their relative positive position in the pockets according to the degree of emphasis, whether positive or negative but place these which are given a negative emphasis sideways in the pocket."

When the Q-sort was completed, the faculty member was asked to review his placement and if there were any unfilled pockets or incorrectly placed cards, to make any adjustments necessary. The researcher then recorded the rank of each statement and carefully noted those with a negative emphasis.

## ANALYSIS OF EMPHASIS SORT

Table 1 in Appendix C summarizes, by each of the 99 functions, the relative positive or negative emphasis given each, and the level of responsibility for its performance as viewed by faculty members.

Table 7.3 shows a rank order listing of the fifteen functions which faculty members indicated were given the most emphasis in their educational programs. This rank order was based on the frequency of responses found in the column containing the three functions given the greatest emphasis. To provide a more complete picture in this Table, the number of faculty members who placed each function within the next two highest columns is also indicated. For each function, the percentage column indicates the per cent of faculty members who placed that function within the top three emphasis categories. For means of comparison with the responsibility sort, the percentage of faculty members who assigned that function to each of the four responsibility levels is also shown. It can be noted that there was a relatively high degree of agreement between these two indices for the 15 functions given the greatest emphasis.

Of particular note in Table 7.3 are functions 93 -- take verbal medication or treatment order from doctor, 22 -- start an intravenous solution, and 76 -- compute fractional doses of medicine. These three functions were also among the top fifteen which were given the greatest number of negative emphasis responses. Although these functions were emphasized, the emphasis was that they were not to be performed by the LPN. This is also reflected in the responsibility sort, for these three functions show high percentages in the "never" column. With the exception of those functions having high negative emphasis, it was found that the higher the percentage for the emphasis sort, the more likely that function was to be independently performed.

## CORRELATION BETWEEN EMPHASIS AND RESPONSIBILITY SORTS

Faculty members tended to give a higher emphasis rating to those same functions to which they had earlier given higher levels of responsibility. Correlations for each function are shown in Table 7.4. In computing the correlations, "independent responsibility" was given a value of four; "shared," a value of three, "direct," two; and "never," one. The emphasis values ranged from 9 (most emphasis) to 0 (least emphasis).

Correlations of .162 or higher were significant at the .01 level. Although Table 7.4 shows that the correlations were not exceedingly high, the majority were statistically significant. At least four conditions seemed to reduce the magnitude of the correlations: (1) the responsibility sort tended to be a bi-modal distribution; (2) the range of the emphasis sort was restricted due to the zero weighting of the two least emphasis rank categories; (3) the tied values within both the responsibility and emphasis sorts; and, (4) the negative emphasis ratings given some functions.



Table 7.3  
RANK ORDER<sup>1</sup> OF FIFTEEN FUNCTIONS GIVEN THE MOST EMPHASIS BY FACULTY MEMBERS

Function	MOST EMPHASIS <sup>2</sup>				RESPONSIBILITY BY PER CENT <sup>3</sup>			
	N=244				N=245			
	3	5	8	% <sup>4</sup>	Independent	Shared	Direct	Never
	Most	Next	Next	Total		Responsibility	Supervision	
53	76	78	48	82.8	95.1	4.9	0.0	0.0
29	70	51	52	70.9	94.7	5.3	0.0	0.0
34	58	66	40	67.2	75.9	8.2	0.4	15.5
98	54	61	61	72.1	91.0	8.2	0.0	0.8
48	41	40	47	52.5	83.3	12.7	2.0	2.0
68	39	43	42	50.8	98.0	1.6	0.0	0.4
56	37	94	53	75.4	91.8	7.8	0.4	0.0
93	33	15	25	29.9	4.1	11.0	7.8	77.1
87	31	61	74	68.0	89.8	9.4	0.0	0.8
25	28	47	51	51.6	46.1	35.9	7.8	10.2
22	28	6	10	18.0	0.8	1.2	2.4	95.5
74	23	30	54	43.9	81.6	17.1	0.8	0.4
36	17	45	70	54.1	82.4	15.5	0.8	1.2
49	14	22	32	27.9	27.8	45.3	17.1	9.8
76	14	11	17	17.2	2.0	20.0	36.3	41.6

- 1) Based on number of responses in most emphasis category only.
- 2) Frequency of response in the three categories at the most emphasis end of sort.
- 3) Per cent of faculty members placing function in that category.
- 4) Total responses in the three most emphasis categories divided by total of 244 possible responses.



Table 7.4

CORRELATION BETWEEN FACULTY EMPHASIS  
SORT AND RESPONSIBILITY SORT  
(N=243)

Function Number	r	Function Number	r	Function Number	r
1*	-.008	34	.445	67	.308
2	.238	35	.336	68	.060
3	.176	36	-.002	69	.078
4	.386	37*	.064	70	.213
5	.214	38	.457	71	.153
6	.211	39*	.166	72	.275
7	.237	40	.319	73	.362
8	.245	41	.114	74	.172
9	.188	42	.383	75	.278
10	.218	43	.219	76*	.118
11*	.069	44	.084	77	.124
12*	.246	45	.129	78	.193
13	.134	46	.155	79*	.141
14	.226	47*	.182	80	.304
15*	.026	48	.243	81	.317
16	.149	49	.288	82	.217
17	.301	50	.370	83	.241
18	.261	51	.368	84	.236
19	.289	52	.237	85	.244
20	.198	53	.171	86	.321
21	.118	54	.072	87	.140
22*	.026	55	.039	88	.192
23	.229	56	.054	89	.335
24*	.008	57	.131	90	.077
25	.120	58	.291	91*	.187
26	.076	59	.185	92*	.053
27	.110	60	.275	93*	.058
28*	.083	61*	.253	94	.213
29	.080	62	.059	95	.333
30*	.144	63*	.313	96	.174
31	.250	64*	.023	97	.231
32	.393	65*	.044	98	.088
33	.145	66	.003	99	.137

r of .162 significant at the .01 level

\*Among the top 20 functions ranked according to number of negative emphasis responses.

## SECTION 2: SELECTED COMPARISONS BETWEEN CARD SORTS DONE BY THREE GROUPS

For the entire study, card sorts of 99 nursing functions were completed by three groups: (1) employed LPNs, (2) their immediate RN supervisors and (3) faculty members.

By group, the sorting(s) were for the following purposes:

- |                          |  |   |
|--------------------------|--|---|
| A. <u>LPN</u>            | 1. Responsibility level<br>2. Importance   | ] Both sorts were to<br>] be related to his<br>current position of<br>employment, the actual<br>clinical area and<br>shift (time of day). |
| B. <u>RN Supervisor</u>  | Responsibility, according to how he viewed the performance of a specific LPN under his supervision.  |   |
| C. <u>Faculty Member</u> | 1. Responsibility level, according to how he saw his graduates performing one year after graduation, and<br><br>2. Emphasis given in educational program, according to degree of emphasis given in program in which he taught. |   |

Table 7.5 shows the number in each of the three groups who completed each type of sort.

Table 7.5  
TYPES OF SORT, BY GROUP

	Responsibility Sort	Importance Sort	Emphasis Sort
Employed LPNs	688	688	
RN Supervisors of 129 of these LPNs	129		
Faculty Members	245		245

### Faculty Members

This Section of Chapter 7 reports a comparison between the importance ratings determined by the employed LPNs and the emphasis ratings determined by RN faculty members. Further comparisons within a type of sort and between types of sorts are detailed in Chapter 8.

## COMPARISON BETWEEN IMPORTANCE RATINGS BY EMPLOYED LPNS AND EMPHASIS RATINGS BY FACULTY MEMBERS

In general, there were few marked differences across the 99 functions. Table 7.6 shows, by rank order, the absolute difference between the mean importance determined by employed LPNs and the emphasis in the educational program determined by faculty members for the 15 functions with the greatest degree of difference. Both sort procedures had a theoretical mean of 4.03.

Functions 29, 68, 66, 55 and 44 are basic and/or simple patient-care procedures and are often performed by nurse aides.

Function 22 was seen by employed LPNs, their RN supervisors, and the RN faculty members as one not performed by LPNs. While the 244 faculty members gave this function a mean emphasis of 1.29 above the importance mean, 194 of them gave negative emphasis to it. The mean importance value given each of functions 69 and 82 is depressed because these two functions are unique to the obstetrics area where only 66 of the 688 LPNs were employed. The 622 LPNs not usually performing these functions assigned them a lower level of importance, thus lowering the mean.

The functions which faculty members emphasized at a level lower than the corresponding importance mean are more complex nursing functions or ones which involve a closer working relationship with the physician, a relationship heretofore considered to be reserved to the domain of the registered nurse. From one-third to over one-half of the LPNs indicated they performed functions 17, 61, 65, and 85 independently or with shared responsibility, and gave them importance values up to 1.26 above the theoretical mean. Faculty members, on the other hand, gave each of these same four functions a mean emphasis as much as 1.18 points below the theoretical mean.

These differences may indicate that faculty members do, indeed, believe these functions should be restricted to performance by registered nurses. However, the data do show that LPNs are, in fact, involved in the performance of these functions and with a relatively high degree of responsibility for their performance. The 1962 National League for Nursing's definition of the two roles of the LPN fails to encompass these types of activities.

In view of this apparent change in functions regularly assigned to, and performed by, employed LPNs since the 1962 definition of roles; appropriate learning experiences must be provided in preparatory or in-service programs, preferably in both.

See Chapter 8 for further detailed comparisons.

Table 7.6

RANK ORDER OF FIFTEEN FUNCTIONS WITH GREATEST ABSOLUTE  
DIFFERENCE BETWEEN IMPORTANCE AND EMPHASIS SORTS  
(Theoretical Mean for Both Sorts is 4.03)

Rank	Function	Importance by Empl. LPNs	Emphasis by Fac. Member	Abs. Diff. in Means
1	*29 - Bathe patient or help patient to bathe (in bed, tub, shower)	4.94	7.18	2.24
2	*68 - Make occupied or unoccupied beds, such as: open, closed, surgical, open toed	4.16	6.34	2.18
3	79 - Note <u>and</u> transcribe doctor's orders on medicine cards, Kardex, etc.	4.79	3.14	1.65
4	*66 - Move patient such as: bed to/from chair, cart to/ from chair	4.76	6.13	1.63
5	61 - Add additional I.V. solution to continuous I.V. solution or transfusion	5.19	3.69	1.50
6	65 - Regulate flow of blood trans- fusions	4.95	3.52	1.43
7	85 - Assist physician with rounds	4.25	2.85	1.40
8	17 - Discontinue I.V. solutions	5.29	3.92	1.37
9	*22 - Start an I.V. solution	2.20	3.49	1.29
10	54 - Make patient assignments to other nursing personnel	2.69	1.42	1.27
11	*69 - Give breast <u>and</u> nipple care to new mother	3.08	4.28	1.20
12	*55 - Prepare <u>and</u> position patient to eat	4.54	5.71	1.17
13.5	45 - Assist during procedures such as: thoracentesis, lumbar puncture	4.73	3.70	1.03

Table 7.6  
(continued)

Rank	Function	Importance by Empl. LPNs	Emphasis by Fac. Member	Abs. Diff. in Means
13.5	*44 - Give oral hygiene to the unconscious patient	4.78	5.81	1.03
15	*82 - <u>Complete</u> newborn nursery admission procedure, such as: foot-prints, weight, bath	3.06	4.06	1.00

\* Functions emphasized by RN faculty members at a level higher than the importance level determined by the employed LPNs.



## CHAPTER 8

### FACTOR ANALYSIS

Chapter 7 presented information on how faculty members sorted 99 nursing function statements according to their perception of how their graduates would be performing as employed LPNs. It is assumed that while sorting the function statements, faculty members may not have been aware that there were underlying concepts and reasons which caused them to react in distinguishable patterns. The analyses reported in this Chapter are an attempt to discover the underlying variables which influenced faculty members in their performance of the function sort. The identification of the commonalities or causal factors is done by the investigator in reviewing the results of the factor analysis. Factors, as they are called, are patterns of distribution of the individual functions as sorted by the faculty members. For this study, the process was one of investigating all possible combinations of sorts and the relationships among the individual functions which resulted in groupings of statements according to the various sorting patterns.

The factor analysis was conducted by use of the principle-axis method with varimax rotation and with nine specified factors. The nine factors were specified on the basis of the nine categories into which the 99 functions were grouped by the panel of nursing consultants:

1. Basic nursing care and procedures 15  
Functions: 5, 8, 16, 26, 29, 31, 41, 53, 55,  
56, 57, 66, 68, 70, 86
2. More complex nursing care and procedures 20  
Functions: 13, 21, 25, 27, 28, 32, 33, 40, 43,  
44, 45, 46, 52, 59, 67, 75, 80, 84,  
96, 99
3. Observation, reporting, and recording 9  
Functions: 34, 48, 72, 74, 79, 87, 90, 93, 98
4. Supportive administrative, supervisory responsibilities 14  
Functions: 7, 15, 30, 36, 37, 39, 47, 51, 54, 64,  
85, 88, 92, 97
5. Medications and I.V.'s 12  
Functions: 17, 19, 22, 49, 60, 61, 65, 73, 76,  
81, 91, 94

6. Treatments	7
Functions: 35, 38, 42, 62, 71, 77, 83	
7. Tests, examinations, and diagnostic procedures	9
Functions: 1, 2, 4, 9, 11, 12, 14, 24, 78	
8. Obstetrics and/or surgical areas	8
Functions: 3, 6, 10, 18, 23, 50, 69, 82	
9. Non-technical and environmental procedures (housekeeping)	5
Functions: 20, 58, 63, 89, 95	
	<hr/> 99

For a detailed description of the procedure by which these nine categories were identified, see Chapter V, Part I of the final report.

Due to the forced distribution utilized in the Q-sort technique, it was expected that many of the factors would evolve in a bi-modal, or two-mode, manner. These modes were identified by some functions having positive factor loadings and others, negative loadings. It must be recognized that even though there are two modes to a particular factor, there is some commonality or underlying variable which distinguishes each factor from the others; and, further, a parallel or other relationship may exist between the two modes. Factors are generated when there is an adequate degree of relationship in the way the faculty members distributed the function statements.

The factor analysis was not conducted to identify "pure factors"; rather, it was a tool used to identify, as nearly as possible, the commonalities and underlying decisions which guided faculty members in performing the card sort. Within each factor, the factor loading for each function reflects the strength of relationship of that function to the factor or underlying variable. The functions within each factor are shown in the tables in rank order of factor loading. Those functions with higher loadings were of greater influence to the researchers as they attempted to identify the underlying variable or concept represented by each factor. It is possible for a particular function to have a high loading on a factor due to some unidentifiable relationship, the characteristics of the statistical process used, or by chance. For this report, those cases where an identifiable relationship was not apparent, an arbitrary decision was made to eliminate the function from the factor. Each function had a loading for each of the nine factors, but only those judged to be of some magnitude were used.

The final step in this process was the identification of the underlying variable, or construct, which appeared to explain how particular

functions may have come to be grouped together in the factor. Because subsequent investigations using this statistical tool could be expected to result in somewhat different combinations, names are not designated for these factors, but rather a general description of what appears to be common among the various functions is indicated.

Tables which accompany each of the factors include additional data beyond that which was a part of the factor analysis. This additional data provide further information which may be of assistance in seeing the relationship of each function to related functions within a factor.

#### FACTOR I

Factor I is a two-mode factor with routine patient room house-keeping activity and routine patient assisting activities in one mode and nursing functions apparently seen to be reserved to the professional nurse in intravenous activities and dealing with patients and physicians in the other mode (each mode is made up of sub-parts in the general commonality of the mode).

Table 8.1

#### FACTOR I-A: ROUTINE CARE OF PATIENT UNIT AND PATIENT ASSISTING ACTIVITIES INVOLVING APPARATUS OR DEVICES FOR LESS DEPENDENT PATIENTS

No.	FUNCTIONS Statement	Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245) Neg. Emph.						
				Ind.	Shar.	Dir.	Never	N	$\bar{X}$	
20	Wash drinking or medicine glasses in kitchenette or nursing	.620	2.48	195	4	0	46	16	1.93	
89	Clean a discharged patient's unit	.593	3.63	197	6	0	42	10	2.60	
58	Disinfect bathroom and toilet	.567	2.26	131	5	3	106	22	1.86	
95	Dust floor in patient's room	.560	1.84	96	2	2	145	37	1.22	
50	Operate autoclave to sterilize instruments or treatment pads	.409	2.02	90	49	26	80	32	1.56	
63	Prepare meals for patients in the main food preparation center, or operate equipment in main kitchen area, such as dishwasher	.344	1.57	19	9	9	208	70	1.45	

Table 8.1: Factor I-A  
(continued)

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
31	Regulate temperature or ventilation in Patient's room	.321	4.77	228	12	1	4	2	0.0
16	Prepare either patient or facilities for religious rites at the bedside	.225	3.89	190	44	7	4	7	2.14
Sub-MEANS		.455	2.81	143	16	6	79	24	2.05
26	Give a routine shampoo to patient	.468	4.09	220	18	0	7	1	4.80
70	Prepare <u>and</u> serve between-meal nourishment	.347	3.57	187	24	3	31	9	2.11
66	Move patient such as: bed to/from chair, cart to/from chair	.321	6.13	226	18	0	1	1	3.96
21	Apply an arm sling	.323	3.74	150	64	10	21	1	1.94
55	Prepare <u>and</u> position patient to eat	.335	5.71	237	6	1	1	0	0.0
5	Apply body restraint such as: posey belt, wristlets	.221	4.75	141	80	16	8	7	3.71
62	Assist patient in postural drainage	.224	4.37	146	71	9	19	3	5.66
Sub-MEANS		.320	4.62	152	40	6	13	3	3.17
MEANS		.392	3.65	151	31	10	53	15	2.33

Table 8.2

**FACTOR I-B: NURSING FUNCTIONS INVOLVING  
INTRAVENOUS SOLUTIONS AND SUPERVISORY, JUDGMENTAL  
ACTIVITIES IN DEALING WITH LEGAL  
SIGNATURES AND PHYSICIAN'S ORDERS**

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
22	Start an I.V. solution	-.480	3.49	2	3	6	234	194	3.86
61	Add additional I.V. solution to continuous I.V. solution or transfusion	-.351	3.69	21	74	60	90	87	3.63
65	Regulate flow of blood transfusions	-.316	3.52	12	60	77	96	07	3.96
Sub-MEANS		-.382	3.57	12	46	48	140	126	3.82
92	Explain the current condition of a patient to the immediate family	-.477	3.24	10	46	54	135	109	3.85
39	Obtain signatures for legal documents, such as permission to operate, consent for autopsy, perform tests, or wills	-.318	3.07	33	60	42	110	92	3.25
Sub-MEANS		-.367	3.16	22	53	48	127	101	3.55
93	Take verbal medication or treatment order from doctor	-.518	4.39	10	27	19	189	172	4.87
79	Note and transcribe doctor's orders on medicine cards, Kardex, etc.	-.351	3.14	26	65	57	97	88	3.55
76	Compute fractional doses of medicine	-.261	4.00	5	49	89	102	99	4.38
12	Perform rectal examination of patient, such as: patient in labor, patient with fecal impaction	-.261	3.17	39	49	55	102	70	3.93
Sub-MEANS		-.348	3.68	22	46	54	124	107	3.93



Table 8.2: Factor I-B  
(continued)

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
28	Remove a nasal pack	-.356	2.34	7	17	43	178	112	2.70
25	Observe vital signs following a general anesthesia	-.277	6.47	113	88	19	25	5	4.80
99	Check functioning of tubes for patient with chest tube drainage	-.275	4.61	35	97	73	40	6	5.67
46	Apply tourniquet to extremity for control of hemorrhage	-.274	3.58	25	51	87	82	48	4.27
Sub-MEANS		-.296	4.25	45	63	56	81	43	4.31
MEANS		-.347	3.75	36	51	45	113	91	3.98

In Factor I, the positive mode (Factor I-A) and its sub-parts contain routine activities often seen to require the least judgment on the part of the practitioner. The negative mode (Factor I-B) contains nursing activities often seen to be of the highest level and requiring of judgments based on more extensive background and responsibility. The sub-parts within each mode are more likely grouped together on the basis of the judgmental level than the specific functions identified. In effect, the two modes contain the extremes of functions performed, or not performed, as seen by faculty members.

**Factor I-A:** This positive mode of Factor I includes two sub-parts. The larger and most compactly defined reflects the maintenance of the physical environment of patients; many of the functions relate to house-keeping and maintaining sanitary conditions in the patient-care unit. The relatively high factor-loadings for most of the functions in this sub-part indicate there is a high degree of commonality among them. The mean emphasis across these functions is below the theoretical average, and therefore would indicate the staff gives them a less-than-average emphasis. The relatively small number of negative ratings given these functions probably indicates that faculty members feel that the LPN is not likely to perform them because they are housekeeping duties and more likely to be performed by other personnel. The responsibility ratings indicate that faculty members expect that when their graduates do perform these functions they do so relatively independently. Functions 31 and 16 are less

closely identified with the other functions in this sub-part. The mean emphasis ratings and the responsibility sorts indicate that faculty members feel these functions are a more important part of the curriculum and are functions to be performed by LPNs.

The sub-part of this positive mode; including functions 26, 70, 66, 21, 55, 5 and 62; are relatively routine patient-care activities. In each case, the function involves direct patient care and a personal service to assist the less critically ill patient. Typically, each function involves some piece of equipment or materials. The mean emphasis given by faculty members indicates they give above-average emphasis to these functions and that they expect their students to perform them, most often with independent responsibility.

Factor I-B: This negative mode of Factor I contains four different types of activities or sub-parts. The overall commonality tying these functions together into a single mode appears to be one having to do with higher level nursing activities. Faculty members may have felt that the functions in this mode should be restricted to performance by a professional nurse. The relatively high factor-loadings in the first three sub-parts show a strong and common underlying theme. This theme is less strong for the last sub-part involving functions 28, 25, 99 and 46.

The negative emphasis column in this table indicates that almost one-half of the faculty members gave a negative emphasis to these functions. In general, the mean negative emphases are higher than the overall emphasis-sort mean for these functions. When the high incidence of "never" is observed in the responsibility column, it appears logical to interpret the faculty members as saying these are functions that should not be performed by an LPN, and they feel fairly strongly about it.

The first sub-part of this mode has to do with IV's and transfusions. The high frequency of "never" in the responsibility sort indicates that faculty members do not expect an LPN to perform these functions; or, if performed, they would be done under close supervision.

The second sub-part, functions 92 and 39, deal with explaining the current condition of a patient to the family and obtaining signature for legal documents. These functions are given relatively low emphasis and are generally seen as not being performed by the LPN.

The third sub-part deals with taking verbal medication orders, noting and transcribing doctors' orders, computing fractional doses of medicines, and performing rectal examinations. These functions were given approximately average emphasis, and less than one-half of the faculty members see them as being performed by the LPN. Almost one-half of the faculty members indicated a negative emphasis for these functions.

The fourth and final sub-part includes the functions of 28, 25, 99, and 46. Faculty members gave a higher emphasis to observing vital signs following a general anesthesia and to checking the functioning of tubes for chest drainage. They also expect the LPN to perform these

functions with a relatively high degree of responsibility. They do not expect the LPN to remove a nasal pack or apply a tourniquet and therefore gave less emphasis to these functions.

#### Comparison of Factor I Between Faculty Members and Employed LPNs.

Factor I as determined by employed LPNs contains two modes somewhat similar to the two modes of Factor I as determined by faculty members. There are, however, distinct differences in the nature of the negative modes. In both cases, the distinction between the two modes differentiates simple nursing functions from more complex nursing functions.

For both groups, functions 89, 20, 31, 58, 70, 55, 26, and 66 were common to the positive mode of Factor I. The commonality here is the maintenance of patient's unit and activities assistive to a less critically ill patient. Employed LPNs had far fewer housekeeping-type functions in their mode and more patient-assisting activities, such as giving an enema, assist patient in recreation, insert suppositories, and collecting specimens. The more direct housekeeping activities such as preparing meals and dusting the floors were not included in the employed LPN grouping.

The negative mode as determined by the employed LPNs involved specialized functions generally associated with surgical or emergency room procedures. Each function involved the use of devices and judgments concerning their functioning. Three functions were common, 46, 99, and 65. In addition, functions 75, 45, and 3, all of which involved surgically related activities, were included. On an average, almost one-half of the employed LPNs indicate they do participate in these functions and almost one-third do with independent responsibility. Additionally, they gave to each function a mean importance well above average. Apparently the employed LPNs see the more complex nursing functions as being a part of their role and important to their job, while faculty members give less emphasis to them and do not ordinarily expect their graduates to be employed in areas where they will be performing the more complex activities. For detailed data, see Appendix D, Tables 2 and 3.

#### FACTOR II

One mode of this bi-modal factor contains functions of a general patient-care nature and the other mode, medications and related activities. The positive and negative loadings indicate that faculty members see a definite differentiation between the two.

Table 8.3

**FACTOR II-A: GENERAL PATIENT CARE ACTIVITIES  
IN AN ASSISTIVE ROLE TO LESS CRITICALLY ILL**

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	X
5	Apply body restraint such as: posey belt, wristlets	.351	4.75	141	80	16	8	7	3.71
90	Record intake and output for an 8 or 24 hour period	.303	6.18	219	25	0	1	3	6.67
41	Instruct patient to deep breathe	.270	5.56	224	17	0	4	3	2.67
27	Give a bath or treat- ment to a patient in a croupette or oxygen tent	.264	5.27	140	75	11	19	3	5.00
55	Prepare <u>and</u> position patient to eat	.259	5.71	237	6	1	1	0	0.0
2	Collect a specimen, such as: sputum, urine, stool	.258	5.85	225	19	0	1	2	5.00
62	Assist patient in postural drainage	.256	4.37	146	71	9	19	3	5.66
53	Obtain temperature, pulse, <u>and</u> respira- tions	.249	7.66	233	12	0	0	2	8.50
98	Observe condition of the skin or body dis- charges, such as: color, odor, appearance	.229	7.24	223	20	0	2	2	6.50
52	Give oral hygiene to the patient with a fractured jaw	.228	4.18	75	95	40	35	16	2.88
26	Give a routine shampoo to patient	.225	4.09	220	18	0	7	1	3.00
56	Take blood pressure	.223	7.37	225	19	1	0	0	0.0
MEANS		.260	5.69	192	38	7	8	4	3.91

Table 8.4

FACTOR II-B: FUNCTIONS RELATED  
TO THE ADMINISTRATION OF MEDICATIONS

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
81	Give intramuscular injections	-.827	4.91	63	109	41	32	23	3.00
73	Give subcutaneous injections	-.821	4.77	60	98	46	41	24	3.50
49	"Pour" <u>and</u> give oral medications	-.804	5.27	68	111	42	24	12	4.41
94	Instill medication for the eye, ear, or nose	-.627	4.27	79	107	33	26	12	2.33
83	Irrigate eye, ear, or nose	-.424	4.07	76	96	38	35	17	3.18
19	Insert rectal or vaginal suppositories	-.367	4.68	128	83	23	11	4	3.75
76	Compute fractional doses of medicine	-.338	4.00	5	49	89	102	99	4.38
79	Note <u>and</u> transcribe doctor's orders on medicine cards, Kardex, etc.	-.307	3.14	26	65	57	97	88	3.55
60	Teach a person to inject his own insulin	-.267	3.11	15	73	66	91	48	2.44
MEANS		-.531	4.25	58	88	47	51	36	3.39

The general nursing functions included in the positive mode of Factor II are seen by faculty members as being a central and important part of the LPN's educational program. This mode has many similarities to that to be found in Factors III-A and IV-A. Probably the clear distinction exists between the two modes in Factor II because faculty members see the medications area as being something distinct and separate from, as opposed to an integrated part of, general patient care.



Factor II-A: A review of the functions and the associated data shown in the Table reveal that Factor II-A is concerned primarily with patient care activities and a close interpersonal relationship, in a supportive role, with an individual patient. While most often carried out while the patient is in a hospital or a similar setting, these functions reflect activities associated with the less dependent patient; in contrast to other factors and modes reflecting highly dependent patient situations.

The faculty gives a very high average mean emphasis to these supportive functions. In fact, this group of functions received a greater emphasis in the curriculum than any other types of functions and about 80% of the faculty members expect LPNs to perform these functions with a high degree of independent responsibility.

Factor II-B: The nine functions in this negative mode were relatively compact and distinct from other modes and factors and were seen by faculty members as being distinct from other patient-care activities. Faculty members gave a somewhat above average emphasis to the functions in this category and approximately 15% gave it a negative emphasis. In general, only about 25 per cent of the faculty members expected LPNs to perform these medication functions with independent responsibility. An equal number never expected them to perform the medication functions. The three functions with the lowest factor loadings, 76, 79 and 60, can be seen to be those with the greatest number of negative emphases and with relatively lower mean emphasis ratings. They also had the highest incidence of "never performed." Generally, faculty members do not see the performance of these functions as being within the role of the LPN. The high factor loadings and the high mean emphases ratings, as well as the negative emphasis indications, reflect that among faculty members there is a high level of concern regarding LPNs performing these functions.

#### Comparison of Factor II Between Faculty Members and Employed LPNs.

The employed LPN's clearly identified the medications factor in their sort. They included functions 49, 81, 73, 94, 76, 79, 60, 19 in this factor. In addition, they included "take verbal medications or treatment orders from the doctor." They also gave a high mean importance rating to these functions. In fact, this rating was somewhat higher than given by the faculty members. On an average, about one-half of the employed LPNs indicated that they never perform the functions in this factor. On the other hand, about one-third performed these functions with independent responsibility, while another one-sixth performed them with shared responsibility. Since the RNs who supervise the employed LPNs agreed with the employed LPNs, it would appear that the employed LPN does, in fact, more often perform the medications functions and with a higher level of responsibility than is reflected in what faculty members are including in the curriculum.

No specifically discernible factor or mode existed for the LPNs that is comparable to the general patient care mode of this factor for faculty members. Among LPNs, the functions were performed

regularly and with a high level of responsibility but were grouped in different fashions across the various factors. This finding was expected because the employed LPNs made their sorts according to a specific employment position while the faculty members were sorting in reference to their total curriculum. Since their curriculum would be appropriate to all their graduates regardless of assignments, we would logically expect a more generalized mode to occur and for that mode to have a commonality of general patient care activities. A very high degree of agreement between faculty members and employed LPNs can be inferred from the factor analyses of these two groups of personnel. For detailed data, see Appendix D, Table 4.

### FACTOR III

The positive mode of this bi-modal factor is oriented to supportive activities with the less dependent patient. The negative mode reflects nursing functions requiring higher levels of judgment when providing nursing care to the more dependent patient.

Table 8.5

#### FACTOR III-A: SUPPORTIVE PATIENT CARE ACTIVITIES IN A NURSING ENVIRONMENT

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	X
68	Make occupied or un-occupied beds, such as: open, surgical, closed, open toed	.652	6.34	240	4	0	1	1	4.00
29	Bathe patient or help patient to bathe (in bed, tub, shower)	.641	7.18	232	13	0	0	3	7.00
53	Obtain temperature, pulse, <u>and</u> respirations	.597	7.66	233	12	0	0	2	8.50
56	Take blood pressure	.527	7.37	225	19	1	0	0	0.0
55	Prepare <u>and</u> position patient to eat	.479	5.71	237	6	1	1	0	0.0
77	Give an enema, such as: soap suds, tap water, oil retention	.433	6.31	203	40	2	0	1	2.00

Table 8.5: Factor III-A  
(continued)

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	X
66	Move patients such as: bed to/from chair, cart to/from chair	.394	6.13	226	18	0	1	1	4.00
2	Collect a specimen, such as: sputum, urine, stool	.348	5.85	225	19	0	1	2	5.00
25	Give a routine shampoo to patient	.284	4.09	220	18	0	7	5	4.80
74	Admit patient to nursing unit and obtain initial nurse's note chart information	.283	6.19	200	42	2	1	2	1.00
MEANS		.434	6.28	224	19	1	1	2	3.63

Table 8.6

FACTOR III-B: HIGHER LEVEL PATIENT CARE  
ACTIVITIES REQUIRING JUDGMENT  
FOR HIGHLY DEPENDENT PATIENTS

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	X
8	Remove potentially hazardous objects such as: glassware, razor or belt from a depressed patient	-.342	4.96	151	67	13	14	6	2.50
43	Adjust apparatus of patient in traction, such as: orthopedic, neck, pelvic	-.329	3.73	35	77	77	56	49	3.57

Table 8.6: Factor III-B  
(continued)

No.	FUNCTIONS Statement	Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph	
				Ind.	Shar.	Dir.	Never	N	$\bar{X}$
99	Check functioning of tubes for patient with chest tube drainage	-.312	4.61	35	97	73	40	6	5.67
96	Instruct paralyzed patient how to establish pattern for habit function of elimination	-.300	3.70	56	87	51	51	10	2.40
52	Give oral hygiene to the patient with a fractured jaw	-.253	4.18	75	95	40	35	16	2.88
46	Apply tourniquet to extremity for control of hemorrhage	-.242	3.58	25	51	87	82	48	4.27
25	Observe vital signs following a general anesthesia	-.233	6.47	113	88	19	25	5	4.80
83	Irrigate eye, ear, or nose	-.230	4.07	76	96	38	35	17	3.18
MEANS		-.280	4.41	71	82	50	42	20	3.66

Both the positive and negative modes of this factor deal with patient care activities provided by prepared nursing personnel. The distinction between the two modes appears to be one of the degree of judgment required by the person giving the service and the degree of dependency of the patient. Functions in each of the two modes would likely be performed in most patient-care settings.

FACTOR III-A: The functions grouped together in the positive mode, III-A, are very similar to those in mode II-A. Each deals with general patient care activities requiring a somewhat lower level of judgment by nursing personnel than those in the negative mode. In each function, there is an assistive role to the patient, but the patient is most likely playing an active part in the activity.

The mean emphasis for this mode is the highest of all factors or modes. This indicates that the faculty members see these functions as being highly important to the role of their graduates. In addition, they see the LPN as carrying out these functions with independent responsibility in almost all cases. Because there is practically no negative emphasis, this would indicate there is high agreement across all faculty members.

This mode is distinguished from the I-A mode in that the functions in this III-A are dealing with patient care while those in I-A deal with maintaining the unit or environment within which the patient care activities are performed.

**FACTOR III-B:** The negative mode of this factor groups patient care activities most often provided to more highly dependent patients such as those with an injury, recent surgery or a mental condition. Under such circumstances, a person providing the service is required to exercise a higher level of judgment concerning the consequences of the performance of the function. A somewhat above average emphasis is given to the functions in this mode. Approximately one-fourth of the faculty members expect LPNs to perform these functions independently while over one-half expect them to perform them under either shared or direct supervision. Almost ten per cent do not expect LPNs to perform these functions, and therefore give a negative emphasis to the functions in this mode. However, on an average, faculty members do see these activities as part of the role of the LPN, although see them more likely performed in conjunction with, or in close cooperation with, a supervisor.

#### Comparison of Factor III Between Faculty Members and Employed LPNs.

The sorts of the employed LPNs defined a mode of a factor that has a number of functions in common with the faculty members' Factor III-B. The common functions are: 99, 52, 43, 25 and 96. In addition, the employed LPN's included: giving nursing care following cataract or retinal surgery, giving bath or treatment to patient in oxygen tent, assist patient in postural drainage, give urinary bladder instillation or irrigation, and apply or remove artificial limb. The employed LPNs gave these functions a high commonality and a well-above-average mean importance rating. Approximately 40% of the employed LPNs indicated they performed the function independently, while an equal number indicated they never performed the function. In general, the employed LPNs showed a somewhat higher level of responsibility in performing the function when in an employment position where the function might be called for.

In general, the faculty members see the functions in both modes being an important part of the curriculum and expected activities of the LPN and the employed LPNs would be in agreement. For detailed data, see Appendix D, Tables 5 and 6.



# FACTOR IV

The positive mode of this factor includes observation, recording, and coordination of patient activities in the functioning of the unit, while the negative mode contains specialized functions usually requiring a higher level of nursing judgments.

Table 8.7

## FACTOR IV-A: OBSERVING, RECORDING, REPORTING AND COORDINATION ACTIVITIES IN THE NURSING UNIT

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
36	Observe <u>and report</u> drainage on a dressing	.387	6.60	202	38	2	3	3	4.67
87	Record condition of the skin or discharges such as: appearance, odor, color	.308	6.95	220	23	0	2	1	5.00
98	Observe condition of the skin or body dis- charges such as: color, odor, appearance	.296	7.24	223	20	0	2	2	6.50
41	Instruct patient to deep breathe	.285	5.56	210	30	1	4	3	2.67
84	Help the patient plan for special diets, such as: low salt, high- low calorie, diabetic, low fat	.267	3.29	25	75	60	85	25	2.36
2	Collect a specimen, such as: sputum, urine, stool	.245	5.85	225	19	0	1	2	5.00
13	Assist patient in recreational or occu- pational therapy, such as: encouragement, phy- sical help	.239	4.55	178	50	7	10	3	2.67
66	Move patient, such as: bed to/from chair, cart to/from chair	.226	6.13	226	18	0	1	1	4.00
Sub-MEANS		.282	5.77	189	34	9	13	5	4.11

Table 8.7: Factor IV-A  
(continued)

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
86	Select appropriate size, type, <u>and</u> position of bed for patient and activity	.303	3.41	64	86	42	53	20	2.35
74	Admit patient to nursing unit and obtain initial nurse's notes chart information	.278	6.19	200	42	2	1	2	1.00
48	Attend nursing unit report to receive condition <u>and</u> status of patients	.270	6.41	204	31	5	5	5	2.60
7	Select roommates for patients	.264	1.72	15	55	44	131	59	1.42
70	Prepare <u>and</u> serve between-meal nourishments	.250	3.57	187	24	3	31	9	2.11
Sub-MEANS		.273	4.26	134	48	19	44	19	1.90
MEANS		.278	5.19	162	41	14	28	10	3.26

Table 8.8

FACTOR IV-B: SPECIALIZED NURSING FUNCTIONS  
REQUIRING A HIGH LEVEL OF JUDGMENT

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
91	Administer immunization, such as: smallpox, tetanus, diphtheria, T.B., polio, allergy	-.428	2.34	7	27	59	152	89	2.66
22	Start an I.V. solution	-.398	3.49	2	3	6	234	194	3.86
65	Regulate flow of blood transfusion	-.389	3.52	12	60	77	96	97	3.96

Table 8.8: Factor IV-B  
(continued)

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
28	Remove nasal pack	-.346	2.34	7	17	43	178	112	2.70
76	Compute fractional doses of medicine	-.341	4.00	5	49	89	102	99	4.38
61	Add additional I.V. solution to continuous solution or transfusion	-.326	3.69	21	74	60	90	87	3.63
93	Take verbal medication or treatment order from doctor	-.315	4.39	10	27	19	189	172	4.87
79	Note <u>and</u> transcribe doctor's orders on medicine cards, Kardex, etc.	-.309	3.14	26	65	57	97	88	3.55
12	Perform rectal examination of patient, such as: patient in labor, patient with fecal impaction	-.262	3.17	39	49	55	102	70	2.90
3	Scrub for surgery or delivery	-.220	2.24	22	40	73	110	45	1.60
MEANS		-.333	3.23	15	41	54	135	105	3.41

The functions contained in the positive mode (IV-A) are seen to be activities that will be engaged in by most LPNs and faculty members give them a high emphasis in their curriculum. This mode is distinguished from the more complex specialized functions found in the negative mode of this factor (IV-B) which are more often seen as not being performed by the LPN; note the high level of negative emphases in Table 8.8.

**FACTOR IV-A:** The functions of this mode are those which reflect the coordination activities between the patient, his records and reports and the functioning of the nursing unit. In the first sub-aspect, including functions 36, 87, 98 the LPN is gaining the information filed. In the remaining functions of the sub-aspect, she is applying them in assisting

the patient in carrying out prescribed treatment activities. The second sub-aspect as reflected by functions 86, 74, 48 and 7 indicates the LPN role in managing the patients as a group or within the procedures of the unit.

The high mean emphasis for both sub-parts indicates the faculty members' strong concern that the curriculum be effective in preparing the LPN for performing in this general role. The great majority of all faculty members feel their graduates will perform these functions and very often on an independent responsibility basis. There is very little evidence of negative emphasis or restriction to the LPNs carrying out these functions.

FACTOR IV-B: The functions in this mode have the commonality of being historically performed only by the professional nurse. In each case, a specialized activity requiring a higher level of judgment is involved. The commonality is not reflected by the content or substantive nature of the function itself. Faculty members classify the intravenous solutions and transfusions in much the same way as they do the noting and transcribing doctor's orders; these specialized procedures and close physician-related functions are apparently seen as being less a part of the LPN practice. The individual and mean emphases are consistently below average. In most cases, the mean of the negative emphases are higher than the positive emphases, again indicating the viewpoint of the faculty members that these specialized functions should not be performed by LPNs. The responsibility sort by faculty members also reflects this feeling; well over 50% of them feel that LPNs should never perform the functions.

#### Comparison of Factor IV Between Faculty Members and Employed LPNs.

The employed LPNs did not identify factors directly comparable to the factor or modes as exhibited in Factor IV. In general, the functions grouped under the two modes of Factor IV tended to be distributed into and across other factors in the employed LPN sorts. For example, they grouped functions 87, 98, 74 and 48 into a general nursing activities factor, which also included recording on individual patient's chart, obtaining TPRs, preparing and positioning patient to eat, and recording input and output. In general, the employed LPNs tend to agree with the grouping of the Factor IV-A by faculty members.

The functions included in the negative mode (Factor IV-B) by faculty members were also distributed across a number of other factors by the employed LPNs. A review of the data for the individual functions included in Factor IV-B by the employed LPNs indicates that they showed a much higher level of performance and a higher degree of responsibility for performance than would be indicated by faculty members. For example, a majority of the employed LPNs indicated they had independent responsibility in discontinuing intravenous solutions. Almost one-third had independent responsibility, and another third shared or direct responsibility, in adding to I.V. solutions. A somewhat lower number had

similar responsibility in regulating the flow of blood transfusions. These activities are most commonly in the "never" category when sorted by faculty members. Again, the instructional staff did not give as high an emphasis to, nor are they expecting their graduates to perform at, the level the employed LPNs and their immediate RN supervisors indicate is common in practice. For detailed data, see Appendix D, Table 8.

#### FACTOR V

The functions in Factor V, a uni-modal factor, are those which can be identified as activities related to genito-urinary conditions.

Table 8.9

#### FACTOR V: GENITO-URINARY PROCEDURES REQUIRING SKILL IN MANIPULATIVE TECHNIQUE AND PERSONAL-EMOTIONAL INDIVIDUAL RELATIONSHIPS

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
42	Catheterize patient	.721	5.97	129	87	20	9	3	6.67
38	Insert indwelling catheter	.690	5.69	120	78	26	21	7	3.29
71	Administer vaginal douche	.446	4.89	139	70	3	33	1	2.0
35	Give urinary bladder instillations or irrigations	.440	5.32	106	96	30	13	6	2.00
19	Insert rectal or vaginal suppositories	.336	4.68	128	83	23	11	4	3.75
9	Strain urine for stones	.331	4.84	205	30	2	8	2	3.00
77	Give an enema, such as: soap suds, tap water, oil retention	.231	6.31	203	40	2	0	1	2.0
MEANS		.456	5.39	147	69	15	14	3	3.24

The highest factor loadings, on functions 42 and 38, relate to catheterization. The faculty members gave a high mean emphasis to all functions in this factor. Across the faculty group, approximately one-half expected LPNs to perform these functions with independent responsibility, while the other one-half expected the function to be performed under some degree



of supervision. Practically no faculty member saw these as functions not to be performed. Consequently, a relatively high emphasis was given them in the curriculum.

#### Comparison of Factor V Between Faculty Members and Employed LPNs.

The employed LPNs determined an almost identical factor to that of the faculty members. In fact, the same first five functions were identified by the employed LPNs and the factor loadings were in the same order. The employed LPNs also saw the performance of these functions as being relatively high in importance in their various assignments. For detailed data, see Appendix D, Table 12.

#### FACTOR VI

Factor VI, which is uni-modal, loads directly and heavily on those functions unique, or very closely related to, the OB-GYN area. They have the highest loadings and therefore influenced the description of the factor to the highest degree. Several supporting, or somewhat related, activities on isolation and vital signs after anesthesia or delivery show up as being related.

Table 8.10

#### FACTOR VI: MATERNITY AND NEW-BORN PATIENT CARE

No.	FUNCTIONS Statement	Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
				Ind.	Shar.	Dir.	Never	N	$\bar{X}$
18	Massage the fundus of newly delivered mother	.636	4.28	59	60	28	98	15	3.73
69	Give breast <u>and</u> nipple care to new mother	.635	4.22	114	33	9	89	5	2.20
82	<u>Complete</u> newborn nursery admission procedure such as: footprint, weight, both	.573	4.06	72	65	17	91	9	2.11
6	Take the fetal heart tone	.568	3.83	56	66	33	90	13	2.85
23	Make infant formula	.350	2.81	48	62	23	112	33	2.03
10	Circulate in operating room or delivery room	.319	2.16	14	48	65	118	54	1.74

Table 8.10: Factor VI  
(continued)

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
33	Use isolation technique for a patient having an infection or communicable disease <u>including</u> <u>care</u> of: body discharges, utensils, linens	.315	5.37	123	94	15	13	4	3.25
25	Observe vital signs following a general anesthesia	.278	6.47	113	88	19	25	5	4.80
3	Scrub for surgery or delivery	.257	2.24	22	40	73	110	45	1.60
MEANS		.437	3.94	69	62	31	83	20	2.70

The first four functions, 18, 69, 82 and 6 load the heaviest and are specific to the obstetric area. These functions also have relatively higher mean emphases in the curriculum. Functions 23, 3 and 10 have high frequencies in the "never" category, but most likely for opposite reasons. Faculty members would not expect the LPNs to make infant formula because others would probably perform this task. The majority of faculty members would not expect the LPNs to be circulating in operating or delivery rooms.

#### Comparisons in Factor VI Between Faculty Members and Employed LPNs.

The employed LPNs described an almost identical factor. The two groups included the common functions of 18, 69, 82, 6, 3, and 10. It is interesting that the employed LPNs do not include making infant formulas or isolation techniques in their factor. The employed LPNs give the average importance about the same level as do the faculty members. Among the employed LPNs who actually were assigned to the OB-GYN area as a full- or part-time assignment, a great majority indicated that they performed the functions in the common group with independent responsibility in most instances. For detailed data, see Appendix D, Table 7.

#### FACTOR VII

This Factor reflects nursing activities performed for patients in a relatively highly dependent situation. The positive mode refers to surgical and surgically related areas, while the negative mode indicates the involvement of more dependent patients, either physically or emotionally.

Table 8.11

## FACTOR VII-A: SURGICAL AND SURGICALLY RELATED ACTIVITIES

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
45	Assist during pro- cedures such as: lumbar puncture	.391	3.70	54	99	68	24	6	1.00
17	Discontinue I.V. solutions	.347	3.92	90	98	30	27	26	3.35
75	Set up equipment for aseptic surgical procedures in loca- tions other than operating room, such as: blood exchange, paracentesis, cir- cumcision, oral surgery, minor sur- gery	.333	3.23	24	75	98	48	30	2.47
40	Obtain an apical pulse	.299	5.36	157	65	15	8	5	4.20
14	Change surgical dressing	.283	5.23	109	83	30	23	13	4.38
61	Add additional I.V. solution to continu- ous I.V. solution or transfusion	.262	3.69	21	74	60	90	87	3.63
85	Assist physician with rounds	.232	2.85	72	91	30	52	22	2.68
MEANS		.307	4.00	75	84	47	39	27	3.10

Table 8.12

**FACTOR VII-B: SUPPORTIVE ROLE WITH  
MORE DEPENDENT PATIENTS**

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
57	Apply side rails to a bed of a patient who becomes confused	-.495	6.02	195	43	2	5	2	5.00
31	Regulate temperature or ventilation in patient's room	-.400	4.77	228	12	1	4	2	0.0
55	Prepare <u>and</u> position patient to eat	-.385	5.71	237	6	1	1	0	0.0
66	Move patient such as: bed to/from chair, cart to/from chair	-.327	6.13	226	18	0	1	1	4.0
8	Remove potentially hazardous objects such as: glassware, razor, or belts from a depressed patient	-.322	4.96	151	67	13	14	6	2.50
44	Give oral hygiene to the unconscious patient	-.270	5.81	184	41	8	12	6	5.50
16	Prepare either patient or facilities for religious rites at the bedside	-.249	3.89	190	44	7	4	7	2.14
MEANS		-.350	5.33	201	33	5	6	3	2.73

The nursing functions included in each mode in this factor are a collection of functions without a high commonality as reflected by the relatively lower factor loadings. The positive mode, in the surgical area, is more clearly defined than the functions in the negative mode.

**FACTOR VII-A:** This mode consists of functions specifically identified in the surgical area or with activities closely related to this area. Several of the functions are supportive relationships with a physician. Again, the faculty members tended to identify the relationship with a physician in the same context and commonality with more complex nursing procedures. Assisting the physician with rounds could easily be interpreted as assisting with surgical rounds and changing dressings. Obtaining an apical pulse may be related to typical surgical activities.

The mean emphasis given by faculty members is about average. In most cases, faculty members expect their graduates to be performing the functions in this mode, more under shared or direct supervision than independently.

**FACTOR VII-B:** The first functions in this mode have a higher loading than those that follow. The highest commonality is reflected in the supporting role to a patient who may be emotionally disturbed or may need nursing personnel to be responsible for his activities. The commonality appears to be services for highly dependent patients in situations where nursing personnel must make basic decisions and perform some of the routine functions and activities for the patient who would generally perform these himself. The contrast between this mode and the positive mode would tend to indicate that faculty members see these functions as requiring less critical judgment, and therefore more likely that the LPN would perform these activities.

The high mean emphasis across these functions and the consistently high indication of performance with independent responsibility, indicate that faculty members give emphasis to these functions and are exercising care that their graduates can successfully perform them.

#### Comparison of Factor VII Between Faculty Members and Employed LPNs.

Functions included in the negative mode of this factor are not specifically identified as a factor by the employed LPNs. They distributed them across several factors.

A factor related to the aseptic-surgical activities was identified by employed LPNs. However, only one function, 45 "assist during procedures such as lumbar puncture," was common between the faculty factor and the employed LPN factor on surgically-related activities. Included in the surgically-related factor for the employed LPNs were functions for the following activities: circulate in operating room or delivery room, scrub for surgery or delivery, set up equipment for aseptic surgical procedures --, apply tourniquet to extremity, and operate autoclaves to sterilize instruments or treatment pads. As explained previously, function 14, change surgical dressing, was not included in the deck of functions sorted by the employed LPNs. For detailed data, see Appendix D, Table 9.



# FACTOR VIII

Table 8.13

## FACTOR VIII: SPECIALIZED SERVICES AND CLINICAL TESTINGS

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg. Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
1	Take x-ray picture	.628	.72	3	1	4	237	124	.90
78	Administer special sensory tests, such as: hearing or vision tests	.562	1.30	12	24	37	172	71	1.44
24	Take an electrocardiograph recording of a patient	.553	.81	2	5	11	227	120	1.11
11	Perform a complete urinalysis including specific gravity and microscopic examination	.534	1.20	2	3	9	231	113	1.44
MEANS		.569	1.01	5	8	15	217	107	1.22

The four functions comprising this factor would most often be performed by outside supportive services or personnel. They apparently have a commonality of being functions performed by specialized service units or possibly in a physician's office; some might also be performed in specialized clinic facilities.

The high factor loadings give a close commonality to these four functions. They indicate that they are quite common on some underlying variable. The mean emphasis is the lowest given to any factor or mode in the total analysis of the sorts done by faculty members. This low emphasis is further exemplified where a great majority of all instructors indicate that they expect their graduates never to perform these functions. Almost one-half of the faculty members gave the function a negative rating and a low emphasis to that negative rating.

### Comparison of Factor VIII Between Faculty Members and Employed LPNs.

It was found that there was no comparable factor or mode determined by the LPNs. However, a somewhat related factor was identified by the employed LPNs who grouped the three functions: 88, 97 and 51. These functions relate to referring a patient to an outside agency, referring

a patient to an agency inside the hospital, and filling out requisitions to special departments such as the laboratory and x-ray department. Approximately one-third of all LPNs do refer patients to these specialized services, but do not perform the services themselves. LPNs employed in physicians' offices were most likely to carry out the functions identified in Factor VIII by faculty members. For detailed data, see Appendix D, Table 15.

#### FACTOR IX

Table 8.14

#### FACTOR IX: SUPERVISORY, COORDINATING AND TEACHING ACTIVITIES

FUNCTIONS		Factor Loading N=244	Mean Emph. N=244	RESPONSIBILITY (N=245)				Neg.Emph.	
No.	Statement			Ind.	Shar.	Dir.	Never	N	$\bar{X}$
30	Employ or discharge personnel, such as: other nurses, nurse aides, housekeepers, or orderlies	.515	.78	4	1	3	237	119	0.96
54	Make patient assignments to other nursing personnel	.475	1.42	14	55	46	130	69	1.39
64	Conduct mental health group therapy session	.457	1.03	2	8	22	213	105	1.19
15	Conduct a planned in-service program	.445	1.00	3	7	40	195	92	0.93
37	Supervise student practical nurses	.436	1.24	3	22	33	187	97	1.35
47	Teach prenatal classes	.283	1.33	4	15	31	195	99	1.32
97	Refer patient to an agency inside the hospital, such as: social service, chaplain	.232	2.73	50	57	74	64	33	2.27
MEANS		.406	1.36	11	24	36	174	88	1.34

The functions included in this factor have the commonality of dealing with other personnel, either patients or employees of the health facility. They include supervisory, administrative or other personnel activities. Many of the functions might more likely be carried out by LPNs in smaller institutions, or by those persons in supervisory positions in larger institutions.

There was a very high factor loading on the first five functions in this factor. This would indicate a strong commonality among them. The very low mean emphasis given by the faculty members would indicate that they do not include content or information concerning these functions in their curriculum to any extent.

Almost 75% of all faculty members indicate that their graduates would never perform functions in this factor. This is reflected by the high number who gave the functions a negative rating. However, the negative ratings were also very low in emphasis. These data would tend to indicate that the faculty members had no real objections to the LPNs performing them but they simply do not expect their graduates to carry out these activities.

#### Comparison of Factor IX Between Faculty Members and Employed LPNs.

A factor as described in Factor IX by faculty members was not determined by the employed LPNs. Comparisons can only be made by individual functions. For example, those LPNs who were serving as owners or supervisors of nursing homes and in some small hospitals did, in fact, employ or discharge personnel and make patient assignments to other nursing personnel. Among those groups of owners and supervisors, the great majority performed these functions with independent responsibility. Across all employed LPNs, approximately one-third referred patients to an agency inside the hospital, function 97. Only isolated examples of performance of functions 64, 15, 37 and 47 were found among the employed LPNs.

#### SUMMARY OF CHAPTER

In general, the nine factors identified by the faculty members as a result of the various function sorts were less clearly identified than those factors identified by the employed LPNs. This is not unexpected since the LPNs sorted the functions in reference to a specific position of employment. Faculty members were required to use a much more generalized base of reference in performing their sorts since they were sorting according to the emphasis each function was given in their curriculum and according to the functions that might be performed by their graduates. Consequently, where it was found that modes II-A and III-A were quite common, and that a number of functions appeared to have crossed several other factors, this was not unexpected. In general, the factor loadings indicated that the factors by the faculty members were much less clearly identified than were those by the employed LPNs.

Factors such as medications, OB-GYN, and the functions requiring high level nursing judgments tended to be common across both faculty members and employed LPNs.

A fairly common tendency appears across all factors in each of the two reference groups: the faculty members are far more conservative in emphasis in the curriculum and in their expectancy of performance for their graduates than is reflected by the LPN actually employed. At least a part of this discrepancy can be accounted for by the fact that the faculty members were sorting according to their expectancy of a graduate one year after graduation. The employed LPNs had a mean employment tenure of several years and consequently could have gained far greater competency after leaving the program. Employed LPNs also indicate a much more direct working relationship with the physician than would be indicated as an expectancy by faculty members who tend to see this role as being in the same category as the higher level nursing functions. Possibly they see these as more likely being reserved to the professional nurse.

Since the sorts by the employed LPNs were confirmed by their immediate supervisors, a tentative interpretation would be that the faculty members tend to be somewhat more conservative in their expectancy of performance than is actually the case in practice.

## CHAPTER 9

### SUMMARY AND DISCUSSION

Forty-five programs in practical nurse education, 29 in Illinois and 16 in Iowa, were studied to determine their characteristics related to organizational structure, curriculum, faculty, student selection criteria and procedures, and perceptions of the role of the licensed practical nurse as held by faculty members.

Data were obtained through instruments completed by, and through personal interviews with, coordinators and instructional staff member(s) of each program. In addition, for the purpose of comparing nursing functions performed by employed LPNs (reported in Part I) with the emphasis given these functions in the educational program, the same card-sort procedures were utilized with the faculty group.

#### Selected Characteristics of Programs

Among the 45 programs, all but six were supported by public monies. Public administrative agencies included local school boards, area community colleges or vocational-technical schools, universities and public hospitals. This reflects the trend for educational costs to be borne by educational institutions supported by tax monies rather than by service institutions as has been prevalent in the past. The remaining six private programs were administered by church-supported hospitals.

The number of years the programs had been in operation ranged from one to 18. The majority of programs were established since the enactment of Public Law 911, the Health Amendments Act of 1956, which provided funds for practical nurse education.

Populations of the communities in which programs were located ranged from about 5,000 to 100,000 or more; the largest was the Chicago metropolitan area. The greatest number were located in cities of between 25,000 and 50,000 population.

During the year of the study, 1966-67, a total of 2,468 were enrolled in 75 classes of the 45 programs; 70% of the programs had fewer than 50 students. One class in each program was designated as its criterion class. The 45 criterion classes had a total of 1,350 students, representing 55% of the total 1966-67 enrollments. Criterion classes ranged in enrollments from 13 to 70.

The full-time equivalency (FTE) of the 318 faculty members who devoted time to the criterion classes, ranged from two to 12; the median number was 4.5. Based on FTE, the mean faculty-student ratio was 1:6.4.

120



### Selected Characteristics of Criterion Class Faculty Members

Faculty members, all women, ranged in age from 22 to 71 and the great majority of them were married as opposed to single, widowed, separated or divorced. In general, they had achieved a higher level of educational preparation than their parents. Among faculty members, children ranged in numbers from none to more than eight and over one-half of the spouses were in occupations of a professional or semi-professional nature.

All but nine of the 318 were registered nurses. The highest level of nursing education for slightly over one-half of the registered nurses was at the diploma level. Of those with degrees, 60% held degrees in the nursing field. Regardless of present level of educational achievement, many were pursuing additional educational experiences through continuing education.

Faculty salaries were found to be higher in the publicly supported programs where instructors salaries ranged up to \$9,500 and coordinators salaries to \$11,500, higher than in the private programs, by \$3,000 and \$2,500 respectively. The median salary for full-time coordinators was \$8,750 and for full-time instructors, \$6,319.

About 20% of the faculty did not plan to return to their present faculty position following the criterion class year. Over one-half of this group planned to take another position of some type. Of those leaving, one-half were between the ages of 20 and 30, a highly mobile age group. Nearly two-thirds were married and were holding full-time faculty positions. This seems to be consistent with the low mean years of employment (slightly over 2½) and with the relatively high percentage of faculty employed for only one year prior to the study (nearly fifty per cent). The combination of these factors indicates a highly mobile, short-tenured employment pattern among the younger faculty members. The continual flow of new instructors, resultant from this pattern, indicates a specific need for in-service teacher education activities on a continuing basis.

### Selection of Students

Generally, the age range for admission to a program was 17 to 55. All programs required at least a tenth grade education or its equivalency; 42% required high school completion or its equivalency. No programs excluded applicants on the basis of race or religion.

All programs required a high school transcript, pre-tests, personal interviews and physical examinations; most required selected immunizations. Relative to the physical examination, discussion with faculty members indicated that obesity was their main concern.

Application procedures reflected a pattern of mass pre-testing of applicants as a means of reducing the total amount of time required for personal interviews.

Most generally, final selection decisions were made by program faculty; in about one-fourth of the programs, however, they were made by an admissions committee including personnel outside the immediate faculty group of a program.

## Curriculum

In all programs, curriculums were covered within a 52 week period; four weeks was the predominant vacation time allowed, usually occurring at holiday time, spring and terminally.

All programs had a basic phase, generally 16 weeks in length, with more classroom than clinical experience; the remaining weeks made up the advanced phase, with progressively expanding amounts of clinical experience. About three-fourths of the programs offered classroom and clinical experiences concurrently; and, seventy-six per cent of the faculty members taught in both areas. There was a notable trend toward the integration of curriculum content as opposed to offering separate, isolated courses.

Most programs provided early clinical learning experiences for short periods of time, increasing them progressively, usually to 20 or more hours per week for the last 30 weeks. Few programs utilized other than daytime hours for clinical experiences. While students had experiences in all the usual types of areas, the medical-surgical area was the one used to the greatest degree.

Affiliating clinical agencies included general hospitals, utilized by all programs; nursing homes, utilized by 60%; and psychiatric hospitals by 25%. Other types less frequently used were public health agencies, clinics, specialized hospitals, and schools for well or handicapped children. Three-fourths of the total 99 affiliating agencies used by the 45 programs were located in the same city as the programs. The majority of the others were within 25 miles but one was as far away as 53 miles.

Students in 20 of the programs received no compensation of any kind; others received cash, laundry of uniforms, meals and/or housing.

## Performance of Nursing Functions

Based on comparison of card sorts of nursing functions by employed LPNs and RN faculty members, there is a definite difference in the way faculty members view the role of the LPN and the way the employed LPN views her own role. Part I of the final report, shows that LPNs are performing at a higher level than the National League for Nursing's statement on practical nursing of 1962 would indicate. Faculty members tend to emphasize content in their educational programs in keeping with the NLN statement, yet LPNs are actually performing at a higher level. This may be partially explained by the high turnover rate among younger faculty. Newer faculty replacements are less likely to be familiar

with the performance of LPNs in the employment setting. Therefore they may tend to be more conservative in what they emphasize in the curriculum in comparison to actual performance of employed LPNs.

Increasing numbers of licensed practical nurses are in roles of assistance to physicians and administrative-supervisory capacities. Insistence upon narrow and unrealistic definitions of performance, contrary to observed and reported evidence of LPNs and RNs actually employed in the field, contributes to inappropriate educational experiences for job requirements.

## LIST OF REFERENCES

- American Nurses Association. A Position Paper. Educational Preparation for Nurse Practitioners and Assistants to Nurses, New York, 1965.
- American Nurses Association. Facts About Nursing. A Statistical Summary, New York, 1966.
- American Nurses Association. "Statement of Functions of the Licensed Practical Nurse," American Journal of Nursing, 1957, 57, 459-460.
- Bailey, Larry J. "An Investigation of the Vocational Behavior of Selected Women Vocational Education Students," Unpublished Doctoral Dissertation, College of Education, University of Illinois, 1968.
- Bertrand, Alvin L. and Souza, Marion. A Study of Practical Nurse Education and Practical Nursing in Louisiana, 1950-1955. New Orleans: State Department of Education, 1955.
- Division of Vocational Education, A Study of Vocational Nursing in California. Los Angeles: University of California, Prepared for the Bureau of Industrial Education, California State Department of Education, 1959.
- Enke, Merle G. North Dakota State Survey of Licensed Practical Nurses. Bismark: Division of Trade and Industrial Education of the Department of Vocational Education, April 1961.
- Hanson, Helen C. and Stecklein, John E. A Study of Nursing Functions in General Hospitals in the State of Minnesota. Minneapolis: The University of Minnesota, 1955. (Mimeographed).
- Johnston, Dorothy F. History and Trends of Practical Nursing. St. Louis: C. V. Mosby Co., 1966.
- Kerr, Elizabeth E. and Petersen, Dale F. Iowa Practical Nursing Sub-Study. Iowa City: University of Iowa, Program in Health Occupations Education, December 1966.
- Kerr, Elizabeth E., Petersen, Dale F., and Czaja, F. Ronald. Practical Nursing in Iowa: A Profile. Iowa City: University of Iowa, Program in Health Occupations Education, 1968.
- Martin, Glen R. "Job Satisfaction in Practical Nursing as a Function of Measured and Expressed Interests," Unpublished Doctoral Dissertation, College of Education, University of Illinois, 1968.
- McGlothlin, William J. and Souza, Marion. Practical Nurse Education in Five States: A Report of the Fifth Regional Conference on Practical Nurse Education. New Orleans: W. K. Kellogg Foundation, 1956.

Morsh, Joseph E. "The Q-Sort Technique as a Group Measure," Educational and Psychological Measurements, 1955, 15, 390-395.

National League for Nursing. "Factors in the Success of Students in Schools of Practical Nursing," Nursing Outlook, 1954, 11, 423-427.

National League for Nursing. Licensed Practical Nurses in Nursing Services. New York: National League for Nursing, Inc., 1965.

National League for Nursing. Nursing Education Programs Today. New York: National League for Nursing, 1962.

National League for Nursing. "Practical Nursing Schools and Their Students," Nursing Outlook, 1953, 1, 51.

National League for Nursing. Report of the Proceedings of the Conference. Joint Curriculum Conference, November 13, 14, and 15, 1960. New York: National League for Nursing, 1961.

National League for Nursing. Statements Regarding Practical Nursing and Practical Nursing Education. New York: National League for Nursing, Department of Practical Nursing Programs, 1968.

Noyes, Frank A. "I Like -----," A Study of Job Satisfaction and Dissatisfactions. Boston: Practical Nurse Research Project, Massachusetts Department of Mental Health, 1960.

Schill, William J. and Arnold, Joseph P. Curricula Content for Six Technologies. Urbana: University of Illinois, College of Education, 1965.

Schill, William J. "The Use of the Q-Technique in Determining Curriculum Content," California Journal of Educational Research, 1961, 12, 178-184.

Sheldon, Stephen M. and Sorenson, Garth A. "On the Use of Q-Technique in Educational Evaluation and Research," Journal of Experimental Education, 1960, 29, 143-151.

Suzuki, Warren N. "A Study of the Images of Nursing Occupations: A View of Practical Nursing Students," Unpublished Doctoral Dissertation, College of Education, University of Illinois, 1968.

Tate, Barbara. The Nurse Career-Pattern Study. New York: National League for Nursing, Research and Studies Service, 1964, Code 19-1156 (Mimeographed).

Tate, Barbara L. and Knopf, Lucille, Nurse Career-Pattern Study Part I: Practical Nursing Programs. New York: Research And Development, National League for Nursing, 1968.



- Tomlinson, Robert M., Ash, Clarence L., Langdon, Lois M., and Suzuki, Warren N. Practical Nursing in Illinois: A Profile. Urbana: University of Illinois, College of Education, July 1967.
- U. S. Bureau of the Census, U. S. Census of the Population: 1960. Washington: U. S. Government Printing Office, 1960.
- U. S. Department of Health, Education and Welfare. Health Manpower Source Book. Washington: Public Health Service, Nursing Personnel, 1966.
- U. S. Department of Health, Education and Welfare, Toward Quality in Nursing Needs and Goals: A Report of the Surgeon General's Consultant Group on Nursing. Washington: U. S. Government Printing Office, 1963.
- U. S. Department of Labor. Health Careers Guidebook. Washington: National Health Council, 1967.
- U. S. Department of Labor. Labor Force Projections by Color, 1970-80. Washington: Special Labor Force Report, 1966, 73, 965-972.
- U. S. Department of Labor and Department of Health, Education, and Welfare. Training Health Service Workers: The Critical Challenge. Washington: Proceedings of the Conferences on Job Development and Training for Workers in Health Services, February 14 and 17, 1966.
- U. S. Department of Labor, Women's Bureau. 1965 Handbook on Women Workers. Washington: U. S. Government Printing Office, 1966.
- U. S. Office of Education. Preliminary Data 1966, Health Occupations Unit, Division of Vocational and Technical Education. (Mimeographed)
- U. S. Statutes, Public Law 84-911. Health Amendment Act of 1956. (Title II to George-Barden Act of 1946).
- U. S. Statutes, Public Law 88-210, Vocational Education Act of 1963.
- Van Trump, William F. "Duties, Competencies and Opportunities for Trained Licensed Practical Nurses Working in Hospitals in Missouri," Unpublished Doctoral Dissertation, College of Education, University of Missouri, 1961.
- Washington State Board for Vocational Education. A Study of Employment Distribution and Training Needs of Licensed Practical Nurses in the State of Washington. Olympia, 1959.
- West, Margaret D. and Crowther, Beatrice. Education for Practical Nursing, 1960. New York: National League for Nursing, A Report of the Committee on the Questionnaire Study of Practical Nursing Schools, 1962.
- Woerdehoff, Frank J. An Analysis of the Practical Nurse Occupation. Indianapolis: Indiana State Department of Public Instruction, Vocational Education Division, 1957.

## APPENDIX A

### RESEARCH INSTRUMENTS

- A-1 School Historical Data: 5.501, Part I - Class Data
- A-2 School Historical Data: 5.502, Part II - Faculty
- A-3 Historical Data - Instructions for Completing Parts I and II
- A-4 Criterion Class Data I: 5.510
- A-5 Interviewer Instructions for Instrument 5.510
- A-6 Criterion Class Data II: 5.533
- A-7 Interpretation of Criterion Class Data II: 5.533
- A-8 Codes for Criterion Class I and II Instruments
- A-9 Curriculum Sequence Format
- A-10 Instructions for Completing the Curriculum Sequence

Appendix A-1

SCHOOL HISTORICAL DATA: 5.501  
PART 1 -- CLASS DATA

ID \_\_\_\_\_

	Class(es)	DATA FOR EACH CLASS									
	Month each class admitted (1)	Quota (Number possible to admit) (2)	Number of Applicants (3)	Number full-time students admitted (4)	Number part-time students admitted (5)	Total admitted (Col. 4 + Col. 5) (6)	Number non-white students admitted (7)	Number Male Students Admitted (8)	Number Col. 6 ever graduated (9)	No. Col 9 licensed first attempt (10)	Number Col. 9 ever licensed (11)
July 1, 19__ through June 30, 19__											
TOTALS											
July 1, 19__ through June 30, 19__											
TOTALS											
July 1, 19__ through June 30, 19__											
TOTALS											
July 1, 19__ through June 30, 19__											
TOTALS											
July 1, 19__ through June 30, 19__											
TOTALS											
July 1, 19__ through June 30, 19__											
TOTALS											

Appendix A-2

SCHOOL HISTORICAL DATA: 5.502  
PART II -- FACULTY

I.D. \_\_\_\_\_

	FACULTY	ED. LEVEL EARNED				MAJORS		TIME EMPLOYED	
	No name necessary	LPN	RN Dip	Bacc	M.A.	(Write in)		% of full time	No. Mos. Emp.
7-1-61 through 6-30-62	1 Coord/Dir								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	Totals								
7-1-62 through 6-30-63	1 Coord/Dir								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	Totals								
7-1-63 through 6-30-64	1 Coord/Dir								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	Totals								

Appendix A- 2

SCHOOL HISTORICAL DATA: 5.502  
PART II -- FACULTY

I.D. \_\_\_\_\_

	FACULTY	ED. LEVEL EARNED				MAJORS		TIME EMPLOYED	
	No name necessary	(Check highest)				(Write in)		% of full time	No. Mos. Emp.
		LPN	RN Dip	Bacc	M.A.	Bacc. Major	M.A. Major		
7-1-64 through 6-30-65	1 Coord/Dir								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
Totals									
7-1-65 through 6-30-66	1 Coord/Dir								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13								
	14								
	15								
Totals									



Appendix A- 3

8-25-66  
5.501-5.502

HISTORICAL DATA

Instructions for completing Parts I and II

PART I -- CLASS DATA

At the top of the page, record the name of your Practical Nursing Program; the legal Administrative Agency under which it operates; the date of the first class ever admitted to your program; the size of the town in which your Program is located; and the name and title of the person who completes these forms.

The body of the form asks for detailed data for all classes entering your program during each fiscal year since July 1, 1948.

--if your program was in operation prior to July 1, 1948, the year accounted for in the first block of the table will be the year July 1, 1948 through June 30, 1949.

--if your program started after July 1, 1948, the first block of the table will record detailed data for the first year in which you admitted a Practical Nursing class.

--if you had only one class each year, record the month that class started in Column 1, and complete Columns 2 through 11 for that class.

--if you had more than one class in a fiscal year, enter the month in which each class started in Column 1, and complete Columns 2 through 11 for each class.

--Be sure to record the totals for each fiscal year in the appropriate row.

Explanation of Column Headings

- Un-numbered column at left -- fill in the blanks to identify each fiscal year that your program has been in operation since July 1, 1948.
- Column 1 -- Month each class admitted: identify each class within each fiscal year by recording the month in which it started the program.
- Column 2 -- Quota: record the maximum number of students your program would have been able to accommodate for that class in that year.
- Column 3 -- Applicants: record the total number of formal applications for admission to your school for that class.
- Column 4 -- Full-time students: record the number of students who entered that class as full-time students.
- Column 5 -- Part-time students: record the number of students who entered that class as part-time students.
- Column 6 -- Total number: record the total number of students who entered that class, including both full- and part-time. This number should equal the sum of Columns 4 and 5.
- Column 7 -- Non-white: record the number of students who entered with that class who were other than white. (Include American Indian, Oriental, Negro).
- Column 8 -- Males: record the number of men who entered that class.
- Column 9 -- Total number ever graduated: record the number of students who entered with that class who ever graduated. Include any students who entered with that class but completed the program with a later class.

Appendix A-3

8-25-66  
5.501-5.502

-2-

Column 10 - Licensed first attempt: record the number of students who entered with that class (whether they graduated with their class or later) who passed the State Board Examination on the first attempt.

Column 11 - Ever licensed: record the number of students who entered with this class who subsequently obtained licenses. (Include any who may have graduated later, and any who may have taken State Board Examinations more than once in order to qualify).

PART II -- FACULTY DATA

Educational background is requested for each faculty member employed by your program for the five years preceding the date of the present study. The reporting period begins July 1, 1961; records are requested by year through June 30, 1966.

Using the work-sheet following this page of instructions, identify each faculty member who has been employed by your Program during the past five years. It is not necessary to identify the faculty members by name -- you may prefer to use initials, numbers, or an alphabetical designation. Use any system of designation that will avoid duplication. Include the date on which this person's employment by your Program began, and the date on which this person left your employ, if he/she is no longer employed by your Program. Please return the work sheet with Parts I and II.

On the form labeled SCHOOL HISTORICAL DATA: 5.502, PART II - FACULTY, enter detailed data for each faculty member for each year during the 5--year period that he/she was employed, either full- or part-time by your Program.

Explanation of Column headings:

Faculty: Enter the initial, number or other code you used on the work sheet to identify those faculty members who worked for your Program during the fiscal year designated in the left-hand column. Use as many lines as necessary to record all persons who worked in a faculty capacity during that year. If you employed more than 15 people on your faculty during that year, attach an additional sheet.

Educational level earned: Record the highest certificate or degree attained by each staff member. Note following instructions for categories:  
L.P.N. -- If highest level attained was licensure as a Practical Nurse, designate whether licensed by waiver (W) or education (E).  
R.N. Dip -- If a professional nurse without baccalaureate degree, designate R.N. (3-year diploma) or A.D. (2-year Associate Degree).  
Baccalaureate -- If the staff member holds a Baccalaureate degree, designate whether Bachelor of Arts (B.A.) or Bachelor of Science (B.S.)  
Masters Degree -- If the staff member holds a graduate degree, designate whether Master of Arts (M.A.) or Master of Science (M.S.)

Majors: For all faculty member who held Baccalaureate and/or Master's Degrees, record both the Baccalaureate and Masters' majors.

Time Employed:

% of full-time -- record the percent of time which the faculty member worked for the program. I.e., a full-time employee would be designated as 100% a quarter-time employee, 25%, etc.

No. of Mos. Employed -- record the number of months employed during that fiscal year.

Appendix A-3

8-25-66  
5.501-5.502

-3-

Record the total number employed during the fiscal year, the total number whose highest certificate or degree is in each category on the form, the total percent of time for the fiscal year, and the total number of employee months, in the spaces provided for fiscal year totals.

## Appendix A-3

8-25-66

5.502

## WORK SHEET

List (using initials or other designation) all faculty members who have been in your employ for the five year period beginning July 1, 1961 through June 30, 1966.

[illegible]

## Appendix A-4

## CRITERION CLASS DATA I

5.510

(9) 2-All  
1-Some  
0-None(10) 1-Yes  
2-NoSchool \_\_\_\_\_ ID \_\_\_\_\_  
Interviewee \_\_\_\_\_  
Name \_\_\_\_\_ Title \_\_\_\_\_ADMINISTRATION-BUDGETLegal Admin. Agcy \_\_\_\_\_ (1)  
Prim Fiscal Officer \_\_\_\_\_ (2)  
Budget involvement Coor \_\_\_\_\_ (9)  
Amt. for Lib. \$ \_\_\_\_\_  
Sufficient \_\_\_\_\_ (10)  
Amt. for equip. \$ \_\_\_\_\_  
Sufficient \_\_\_\_\_ (10)  
No. of classes (8-1-66 to  
7-31-67) \_\_\_\_\_CRITERION CLASSSt. date M \_\_\_\_\_ D \_\_\_\_\_ Y \_\_\_\_\_  
C. date M \_\_\_\_\_ D \_\_\_\_\_ Y \_\_\_\_\_  
Admission quota \_\_\_\_\_  
No. Ft. Stud. \_\_\_\_\_  
No. Pt. Stud. \_\_\_\_\_  
Total crit. class \_\_\_\_\_  
No. non-white \_\_\_\_\_  
No. males \_\_\_\_\_STUDENT SELECTION REQUIREMENTSEDUCATIONReq. min. Ed. \_\_\_\_\_  
GED exam accepted \_\_\_\_\_ (10)  
H.S. transcript req. \_\_\_\_\_ (10)  
H.S. grade pt. consid. \_\_\_\_\_ (10)  
Min. for cut off \_\_\_\_\_SOCIALMin. age for entrance \_\_\_\_\_  
Max. age for entrance \_\_\_\_\_  
Sex/Marital Status not admiss-  
ible(4) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Race/Religion not admissible  
(4) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_PHYSICALPhys. exam req. \_\_\_\_\_ (10)  
By whom \_\_\_\_\_ (2)  
When: pre-adm. \_\_\_\_\_; after adm.  
\_\_\_\_\_ wks; compl. \_\_\_\_\_  
Chest x-ray req. \_\_\_\_\_ (10)  
Immunizations req. \_\_\_\_\_ (10)  
0. don't know 1. SMPX 2. Tet 3.  
TYPH 4. TB 5. POLIO 6. DIPH 7. Sc.  
Fr. 8. None 9. Other (specify) \_\_\_\_\_  
Dental exam req. \_\_\_\_\_ (10)PERSONAL INTERVIEWSRoutinely conducted \_\_\_\_\_ (10)  
By (2) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
No. per applicant \_\_\_\_\_  
Sch provide stud housing \_\_\_\_\_ (10)  
Req. live app. housing \_\_\_\_\_ (10)PRE-ADMISSION TESTS

Sch req pre-ent. tests \_\_\_\_\_ (10)

TEST (5) ( '65-'66 )	Amt. (9)	Person (2)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

TEST (5)--('67-'68)

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Who pays for tests \_\_\_\_\_ (2)

STUDENT COSTTuition \$ \_\_\_\_\_  
Testing fees \_\_\_\_\_  
Health exam fees \_\_\_\_\_  
Other fees (specify) \_\_\_\_\_

Med. care ins. \_\_\_\_\_

Uniforms \_\_\_\_\_

Lndry uniforms pd by \_\_\_\_\_ (2)

Textbooks \_\_\_\_\_

Other (specify) \_\_\_\_\_

FACULTY	Highest Degree	Bacc. Major	Masters Major	Other	% of time Employed
Coor/Dir					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

(6)

(7)

(7)



Interviewer Instructions for Instrument 5.510

GENERAL INSTRUCTIONS

After most questions there is a number in parentheses, this number corresponds to a category on the code sheet in which the desired response can be located. Those questions which are not followed by a number in parentheses can be answered by a total-number, check mark, or date. Also, the line(s) after each question is an indication of the possible numbers or coding numerals that are the desired responses.

Interview Sequence and Instructions

The following sections are the order and suggested manner in which the questions should be asked. After many questions, additional information will be given (in parentheses) to help clarify possible problems.

Heading

This part should be self explanatory. But one item should be pointed out-the School ID is the number we have assigned to each School; consequently, it should be filled out by the interviewer before each visit.

Administration-Budget

What is the legal administrative agency?

Who is the Primary Fiscal Officer?

To what extent is the Coordinator/Director of the PN Program involved in budget planning? (For only the PN Program.)

What amount was budgeted for the PN Program library this year? (For their fiscal year.)

Did this amount prove to be sufficient for library needs?

What amount was budgeted for equipment this year? (For their fiscal year.)

Was this amount sufficient to meet equipment needs?

How many PN classes do you plan to start between August 1, 1966 and July 31, 1967.

Criterion Class

What is the starting date for the criterion class?

What is the closing date for this criterion class?

What was the admission quota for this class?

How many members of this class are full-time students?

How many members of this class are part-time students?

The total number enrolled in the criterion class is...?  
of these, how many are non-white?

How many men are enrolled in this class?

Student Selection Requirements

Education

What is the minimum education required for admission to your program? (The response should be the number of years.)

Is the GED exam acceptable?

Do you require a High School transcript?

For admission to your program, is the High School grade point considered?

What is the minimum G.P.A. for acceptance?

Social

What is the minimum age for entrance to your program?

What is the maximum age for entrance to your program?

Do you exclude applicants on the basis of the following Sex/Marital characteristics...?

(Read to the respondent the possible foils on the coding sheet. Do the same for the Race/Religion question. The coded responses for these two questions are double numerals and consequently the lines provided are not an indication of the possible coded responses. Therefore, if a program does exclude applicants use one line for each excluded category.)

Do you exclude applicants on the basis of the following. Race/Religion characteristics...?

### Physical

Is a physical examination required for admission to your program?

By whom is the physical given? (The three possible foils for this question are in category (2) numbers--32,33, or 34.)

When must the physical be taken? (If the deadline is after admission write in the maximum number of weeks. If the physical must be taken before admission or at completion put a check mark on the lines provided.)

Is a chest x-ray required?

Are immunizations required? (If they are required, circle the ones which are in the next question. SMPX=smallpox; TET=tetanus; TYPH=typhoid; DIPH=diphtheria; ScFr=scarlet fever.

Is a dental examination required?

### Personal Interviews

Are personal interviews a part of your pre-admission process?

What are the positions of the personnel who conduct these interviews? (List all personnel who interview applicants.)

How many times is a prospective student personally interviewed?

Does the school provide student housing?

Are students required to live in school approved housing?

### Pre-admission Tests

Are all prospective students required to take pre-entrance tests?

What pre-admission tests did you use in 1965-66?

(Prior to the criterion class. For this question it will be preferable to list all the tests then go back and ask the amount and person for each.)

Amount--Do all your students take (for example--the Otis?)

Person--Who administers this test? (For this part we want to know if the state employment service or other agencies are involved in pre-admission testing.

The title/position of the people who administer tests will be an indication of the agency they are employed by.)

What pre-admission tests do you anticipate using for 1967-68? (For this question we want only the tests. The reason is to see if the tests we supplies for the criterion class has influence their chance for the future.)

Who pays for pre-admission tests?

### Student Cost

In this section we want to know the assessed fee to the student (for the entire PN Program) for each of the listed items.

Because this list is not inclusive we want to know the cost of any other major categorical fee they charge each student. Also, if an item on our list is included in another item it is not necessary to itemize both. The question, "Who pays for the laundry of uniforms" has been added to this section. It is a "pointed question," we want to know if there is any hospital involvement.

### Faculty

In this section it is not necessary to write in the name of the Coordinator but we do want the name of each faculty member in the PN Program. We will be collecting additional information on these people our 3rd visit and, consequently this is the best way to identify them. In the interview situation it may be necessary to stress this point.

In collecting information in the faculty we want to know the highest degree attained by each. If a person has received a Bacc. degree we want to know what their major was as categorized on our code sheet. If a person has received their Masters degree we want to know both their Bacc. and Masters major as categorized on our code sheet. The "Other" section can be used for writing in any comments that may give us a better picture of a person's educational background.

For "% of time employed"--full-time is equal to 100%. Part-time, etc. should be proportional to 100.

### Conclusion

If the above discussions have not answered the questions that may have arisen, it may be beneficial to look at the old form.

Criterion Class Data II  
5.533

6-12-67

School \_\_\_\_\_  
Interviewee \_\_\_\_\_I.D. \_\_\_\_\_  
I.D. \_\_\_\_\_

Name \_\_\_\_\_

CLINICAL EXPERIENCE

What wk in total prog:

1st observ \_\_\_\_\_  
1st pat contact \_\_\_\_\_  
4 hrs clin exp \_\_\_\_\_  
10 hrs clin exp \_\_\_\_\_  
20 hrs clin exp \_\_\_\_\_

Hrs am \_\_\_\_\_

Hrs pm bef 6 pm \_\_\_\_\_

Comments \_\_\_\_\_

FINANCIAL AID

Clin. area stud. comp.

Cash \_\_\_\_\_ B-10  
Laundry \_\_\_\_\_ B-10  
Meals \_\_\_\_\_ B-10  
Housing \_\_\_\_\_ B-10

Ave hrs/wk sched in-sch study

Pred. clarm phase \_\_\_\_\_  
Pred. clin. phase \_\_\_\_\_

Name \_\_\_\_\_

Service \_\_\_\_\_ F-2

Control \_\_\_\_\_ F-3

Bed. size \_\_\_\_\_ F-4

Dist. sch. \_\_\_\_\_ G-4

Name \_\_\_\_\_

Service \_\_\_\_\_ F-2

Control \_\_\_\_\_ F-3

Bed. size \_\_\_\_\_ F-4

Dist. sch. \_\_\_\_\_ G-4

No. of weeks:

20 hrs or more clin  
exp \_\_\_\_\_

No. of days:

PM shift (6-11) \_\_\_\_\_

Why? \_\_\_\_\_

Ngt shift (11-7) \_\_\_\_\_

Why? \_\_\_\_\_

AFFILIATING AGENCIES

No. of \_\_\_\_\_

General Hosp. \_\_\_\_\_

Specialized Hosp. \_\_\_\_\_

Nursing Home \_\_\_\_\_

Other (specify) \_\_\_\_\_

Name \_\_\_\_\_

Service \_\_\_\_\_ F-2

Control \_\_\_\_\_ F-3

Bed. size \_\_\_\_\_ F-4

Dist. sch. \_\_\_\_\_ G-4

Name \_\_\_\_\_

Service \_\_\_\_\_ F-2

Control \_\_\_\_\_ F-3

Bed. size \_\_\_\_\_ F-4

Dist. sch. \_\_\_\_\_ G-4

CLIN. SUPERVISION - STUD.

Degree of fac involvement

(except OB) \_\_\_\_\_ B-10

Fac involv. in OB \_\_\_\_\_ B-10

Name \_\_\_\_\_

Service \_\_\_\_\_ F-2

Control \_\_\_\_\_ F-3

Bed. size \_\_\_\_\_ F-4

Dist. sch. \_\_\_\_\_ G-4

Faculty	Mos.		Status	Time Dist. %			Salary Source			Comments
	Emp.	Dates		Adm.	Class	Clin.	Sch.	Agcy.	Other	
1. Coord.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										

Total Budgeted Positions \_\_\_\_\_

FT \_\_\_\_\_ PT \_\_\_\_\_

Interpretation of Criterion Class Data  
5.533

6-15-67

School

What is the formal title of this school/program?

School I.D.

Filled in by interviewer.

Interviewer

Name and title of person being interviewed.

Interviewer I.D.

Filled in by interviewer.

Clinical Experience<sup>1</sup>

1st observ.

At what week in your program did the students get their first clinical observation? This may have been a tour of the affiliating agency, e.g. a hospital.

1st pat. contact

At what week in your program did the students get their first patient care contact?

4 hrs. clin. exp.

At what week in your program did the students spend at least 4 hours in the clinical area?

10 hrs. clin. exp.

At what week in your program did the students spend at least 10 hours in the clinical area?

20 hrs. clin. exp.

At what week in your program did the students spend at least 20 hours in the clinical area?

Hrs. am - Hrs. pm bef 6 pm

In the first week that your students get 20 hours of clinical experience, how many hours are scheduled in the morning (am) and how many hours are scheduled in the afternoon (before 6 pm)?

Comments

This has been included for purposes of clarification of an above question(s) when necessary. For example, a tour of the hospital (1st observ.) was scheduled the first week of class but because the uniforms were late in arriving the tour was rescheduled the fifth week of school.

---

<sup>1</sup>The code for this three part section is simply the number of the week the event takes place in their program - excluding vacation time.



**20 hrs. or more clin. exp.**

What is the number of weeks your students receive 20 hours or more of clinical experience?

**PM shift (6-11)**

What is the number of days your students are scheduled in the clinical area between 6 pm and 11 pm?

**Why**

It is a wide spread belief that students can gain the necessary clinical experience by only being scheduled during the first shift (7am - 3pm). Therefore, in situations where they are scheduled after 6 pm we would like to know why.

**Ngt. shift (11-7)**

What is the number of days your students are scheduled in the clinical area between 11 pm and 7 am?

**Why**

The explanation under the above "Why" also applies here.

**Clinical Supervision - Students****Degree of fac. involvement (except OB)**

Except in OB, what is the degree of faculty (a person whose formal responsibility, totally or in part, is teaching or supervision of the students) involvement in the clinical supervision of the students? Is it all, some, etc. (Code B-10)

**For involv. in OB**

What is the degree of faculty involvement in the clinical supervision of the students in OB? Is it all, some, etc. (Code B-10)

**Financial Aid****Clin. area stud. comp.**

Are the students compensated by any of the affiliating agencies in terms of cash, laundry, meals, or housing for the services they perform in the clinical area? (Code B-10)

**Ave. hrs./wk. sched. in-sch. study**

When the students are predominately in the classroom phase of their training, what is the average number of hours per week of scheduled in-school study? (Write in number)

When the students are predominately in the clinical phase of their training, what is the average number of hours per week of scheduled in-school study? (Write in number)

Affiliating AgenciesNo. of

What is the total number of affiliating agencies used by this class? Reference is to the total number used by this class irregardless of the type of agreement between the school and the affiliating agency, i.e., whether it is a formal contract or only a verbal agreement to use or visit their facilities. (Write in number)

Of the total number of affiliating agencies used by this class, how many are general hospitals, specialized hospitals, nursing homes, or other types of institutions? (Write in number)

Name, Service, Control, Bed size, Dist. sch.

For each affiliating agency the following questions are to be asked: What is its name?

What type (service) institution is this? (as listed in code F-2)

Who operates (control) this institution? (as listed in code F-3)

What is the bed size of this institution, excluding bassinets? (Code F-4)

How many miles is this affiliating agency from the P.N. program? (Code G-4)

Faculty Information

What is the total number of budgeted faculty positions for the class? Of this total number, how many positions are full-time and how many are part-time? (Write in number)

Note:

If two people have occupied the same budget line during this class indicate by bracketing their names in the faculty column above.

Faculty

All faculty who had any contact with this class should be listed by name/I.D.

Mos. Emp.

The number of months each faculty member is employed for this class, e.g., if a person is employed part-time from November to February, a 4 would be entered in this column.

Dates

The month of the starting and termination date of each faculty member for this class should be entered in this column.

Status

For the period of each person's employment designate if they are full-time (FT) or part-time (PT). Ft and PT will be defined by each school situation. Some schools may define FT as 6 hours/day, others may define it as 8 hours/day.

**Note:**

An individual's period of employment will be considered as FT if the school defines their responsibilities as FT for their period of employment. Therefore, it is possible for one person to work for two months and be defined as FT, and another person to work for twelve months and be defined as PT.

**Time Dist %**

For the period of each person's employment designate what per-cent of their duties are administrative, classroom, and clinical. Per-cent total for each person should equal 100.

**Salary Source**

Specify what per-cent of each person's salary comes from the school, affiliating agency or some other source. Per-cent total for each person should equal 100.

**Comments**

This section should be used for any additional information deemed relevant, e.g., reason(s) a faculty member resigned or was fired.

## Appendix A-8

Coding: Forms 5.510 (Criterion Class Data I)  
5.533 (Criterion Class Data II)

### 1. AGENCIES

#### Public

- 01 Local School Board
- 02 County School Board
- 03 Area Vocational-Tech School
- 04 Area Community College
- 05 College or University

#### Private

- 06 Church
- 07 Private
- 08 Hospital
- 09 Private Enterprise
- 10

#### Miscellaneous

- 11 Practical Nurse Program
- 12 U.S. Employment Service
- 13
- 14 Consulting or Testing Service
- 15

### 2. PERSONS

#### 00 Legal Adm. Agency

- 01 Superintendent
- 02 Dean
- 03 Financial Officer
- 04 Director-Adult Education
- 05 Director-T&I Education
- 06 Counselor-School
- 07 Secretary or Clerk
- 08 Staff-Adult Ed.
- 09 Staff - T&I

#### 10 P.N. Program

- 11 Prof. Nurse Coord/Dir
- 12
- 13
- 14
- 15
- 16 Counselor-P.N. Program
- 17 Secretary or clerk (fulltime)
- 18 Staff (Coord. and/or Inst.)
- 19 Student Secretary

#### 20 Affiliating Agency

- 21 Administrator, Hospital
- 22 Administrator, Nursing Home
- 23 Financial Officer
- 24 Director, Nursing Services
- 25
- 26
- 27 Secretary or Clerk
- 28 Nursing Services Staff
- 29

#### 30 Other (specify if not coded)

- 31 Student
- 32 Physician-School designated
- 33 " -Personal
- 34 Physician=school or personal
- 35 Psychologist
- 36 Counselor-Employment Soc.
- 37 Public Accountant
- 38 Psychiatrist

#### 40 Combination of persons and/or agencies

- 41 Student P.N. Program
- 42 Student and Affiliating Agency
- 43 P.N. Program and Affiliating Agcy.
- 44 Program, Aff. Agcy. and Stud.
- 45 Other (specify)

### 3. IMMUNIZATIONS:

- 0. Don't know
- 1 smallpox
- 2 tetanus
- 3 typhoid
- 4 TT
- 5 polio
- 6 diphtheria
- 7 scarlet fever
- 8 none
- 9 other (specify)

### 4. EXCLUSIONS

- 0 Don't know
- 1 men
- 2 married women
- 3 divorced/separated
- 4 remarriages
- 5 nuns
- 6 race
- 7 religion
- 8 race and religion
- 9 none

### 5. TESTS

#### 00 Aptitude and I.Q. (specify if not coded)

- 01 Otis
- 02 Calif. Short Form
- 03 Miller's Analogies
- 04 Kuhlman-Anderson
- 05 ACE
- 06 Bennett
- 07 Henmon-Nelson
- 08 PACE
- 09 GATB

#### 10 Achievement (specify if not coded)

- 11 SWTP (Illinois)
- 12 Calif. Achievement
- 13 ITED (Iowa Tests)
- 14 Stanford Ach. Test
- 15 SCAT (School & College)
- 16 STEP (Sequential Tests)
- 17 NIP
- 18 TUC

#### 20 Interest (specify if not coded)

- 21 SVIB (Strong Voca. Int.)
- 22 Kuder

#### 30 Attitude, Personality (specify if not coded)

- 31 Allport-Vernon-Lindzey
- 32 Super Work Values
- 33 IPAT
- 34 MMPI

### 6. EDUCATION PREPARATION

- 0 Don't know
- 1 P.N. only
- 2 P.N. and courses
- 3 P.N. BSN
- 4 RN BA or BS
- 5 RN MSN
- 6 RN MA or MS
- 7 RN Masters +
- 8 L.P.N.
- 9 Other

### 7. MAJORS

- 0 Don't know
- 1 Nursing Education
- 2 Nursing Service
- 3 Education
- 4 Liberal Arts
- 5 Home Economics

### 9. AMOUNT

- 2 All
- 1 Some
- 0 None

### 10. YES-NO

- 1 Yes
- 2 No

### 8. USE OF FACILITIES

- 1 this P.N. program only
- 2 w/an R.N. program
- 3 w/another P.N. program
- 4 w/med and/or para-med
- 5 w/more than one health-related
- 6 w/a non-health-related
- 7 w/more than one non-health
- 8 w/health-related and non-health

## System

[illegible]

**KEY**

✓ - indicates subject is taught, its length, and what week(s) it occupies in the curriculum.

0 - indicates student learning experience is by observation, length of observation of the subject, and what week(s) this observation occupies in the curriculum.

**X - subject is not taught.**

**Curriculum Sequence**  
(check only one)

\_\_\_\_\_ Only sequence used  
\_\_\_\_\_ Most commonly used sequence  
\_\_\_\_\_ Most preferred of equally used sequences



## Instructions for Completing the Curriculum Sequence

### General Instructions

The purpose of this instrument is for you to construct your curriculum sequence. Those schools which divide a class into distinct sections may have more than one curriculum sequence. That is why on page two you are asked to check one of three categories, i.e., "Only sequence used" if you did not divide this class into sections at any time during the program; "Most commonly used sequence" or "Most preferred of equally used sequences" if you did divide this class into sections at any time during the program.

Page two also contains a list of 32 content areas and five blank spaces. The broad areas of curriculum for practical nursing, published by the National League for Nursing and the U. S. Office of Education, were used as a guide for the development of this list. The listed 32 areas are not necessarily accurate for your curriculum; therefore, you may need to omit some and/or identify additional content areas appropriate to your specific curriculum sequence. The blank spaces are for this purpose. At the bottom of page two there is a key which defines three symbols you are asked to use to complete the worksheet.

### Specific Instructions

1. In the row marked "VAC", designate all days and weeks of vacation this class received.

#### Examples

If this class received two days of vacation at Thanksgiving and this was the 13th week of school, enter the number "2" in row "VAC" and column 13.

If this class received two weeks and one day of vacation at Christmas and this was the 17th, 18th and 19th week of school, draw a line down the complete week column under week 17 and 18, and enter the number "1" in column 19.

2. Proceed through the list of 32 areas plus any additional ones needed to complete your total curriculum sequence. After each area number (left-hand column of the worksheet) use the appropriate symbol(s) to designate the type of learning experience, its length, and in what week(s) it occurred in the curriculum. If an area is not appropriate to your sequence, put an "X" in column 1 (first week) after that area number.

#### Examples

If "Beginning Fundamentals" was taught the first six weeks plus two days, put a check after 1 (the area row) in the week columns 1-6 and a "2" in week column 7.

If the students spent one day in the 25th week observing the activities in the Formula Room, after 27 (the area row) and in the week column 25 you would put a "1" with a circle around it.

## **APPENDIX B**

### **99 NURSING FUNCTION STATEMENTS**

1. Take x-ray pictures
2. Collect a specimen, such as:  
sputum - urine - stool
3. Scrub for surgery or  
delivery
4. Perform a urine analysis  
for sugar
5. Apply body restraint,  
such as: posey belt -  
wristlets
6. Take the fetal heart tone
7. Select roommates for  
patients
8. Remove potentially  
hazardous objects such  
as glassware, razor, or  
belts from a depressed  
patient
9. Strain urine for stones
10. Circulate in operating  
room or delivery room
11. Perform a complete urine  
analysis, including  
specific gravity and  
microscopic examination
12. Perform rectal examination  
of patient, such as:  
patient in labor -  
patient with fecal  
impaction
13. Assist patient in recrea-  
tional or occupational  
therapy, such as:  
encouragement - physical  
help
14. Change a surgical dressing\*
15. Conduct a planned in-  
service program
16. Prepare either patient or  
facilities for religious  
rites at the bedside
17. Discontinue I.V. solutions
18. Massage fundus of newly  
delivered mother
19. Insert rectal or vaginal  
suppositories
20. Wash drinking or medicine  
glasses in kitchenette on  
nursing unit
21. Apply an arm sling
22. Start an I.V. solution
23. Make infant formula
24. Take an electro-cardiograph  
recording of a patient
25. Observe vital signs following  
a general anesthesia
26. Give a routine shampoo to  
patient
27. Give a bath or treatment to a  
patient in a croupette or  
oxygen tent
28. Remove a nasal pack
29. Bathe patient or help patient  
to bathe (in bed, tub,  
shower)
30. Employ or discharge personnel  
such as: other nurses, nurse  
aides, housekeepers, or  
orderlies
31. Regulate temperature or venti-  
lation in patient's room
32. Remove fecal impaction
33. Use isolation technique for a  
patient having an infectious  
or communicable disease  
including care of: body dis-  
charges - utensils - linens
34. Record on individual patient  
chart observations made or  
treatments given by you
35. Give urinary bladder instil-  
lations or irrigations

---

\* As used in employed LPN Sort:  
14. Insert tube and collect  
gastric analysis specimen.

36. Observe and report drainage on a dressing\*
37. Supervise student practical nurses
38. Insert indwelling catheter
39. Obtain signatures for legal documents, such as: permission to operate, consent for autopsy, perform tests, or wills
40. Obtain an apical pulse
41. Instruct patient to deep breathe
42. Catheterize patient
43. Adjust apparatus of a patient in traction, such as: orthopedic - neck - pelvic
44. Give oral hygiene to the unconscious patient
45. Assist during procedures such as: thoracentesis - lumbar puncture
46. Apply tourniquet to extremity for control of hemorrhage
47. Teach prenatal classes
48. Attend nursing unit report to receive condition and status of patients
49. "Pour" and give oral medications
50. Operate autoclave to sterilize instruments or treatment pads
51. Fill out requisitions to special departments such as laboratory or x-ray
52. Give oral hygiene to the patient with a fractured jaw
53. Obtain temperature, pulse, and respirations
54. Make patient assignments to other nursing personnel
55. Prepare and position patient to eat.
56. Take blood pressure
57. Apply side rails to a bed of a patient who becomes confused
58. Disinfect bathroom and toilet
59. Give nursing care (not necessarily medications) to a patient following cataract or retinal surgery
60. Teach a person to inject his own insulin
61. Add additional I.V. solution to continuous I.V. solution or transfusion
62. Assist patient in postural drainage
63. Prepare meals for patients in the main food preparation center, or operate equipment in main kitchen area, such as dish washer
64. Conduct mental health group therapy sessions
65. Regulate flow of blood transfusions
66. Move patient such as: bed to/from chair - cart to/from chair
67. Apply and remove artificial limb
68. Make occupied or unoccupied beds, such as: open, closed, surgical, open toed

\* As used in employed LPN Sort:

36. Change the prescribed diet of a sick person, such as: liquid to soft, soft to solid, solid to liquid.

69. Give breast and nipple care to the new mother
70. Prepare and serve between-meal nourishment
71. Administer vaginal douche
72. Complete and sign incident or unusual report forms
73. Give subcutaneous injections
74. Admit patient to nursing unit and obtain initial nurse's notes chart information
75. Set up equipment for aseptic surgical procedures in locations other than operating room, such as: blood exchange, oral surgery, paracentesis, minor surgery, circumcision
76. Compute fractional doses of medicine
77. Give an enema, such as: soap suds, tap water, oil retention
78. Administer special sensory tests, such as hearing or vision tests
79. Note and transcribe doctor's orders on medicine cards, Kardex, etc.
80. Make substitutions within the prescribed diabetic diet according to patient's appetite
81. Give intramuscular injections
82. Complete newborn nursery admission procedure, such as: footprints, weight, bath
83. Irrigate eye, ear, or nose
84. Help the patient plan for special diets, such as: low salt, diabetic, high-low calorie, low fat
85. Assist the physician with rounds
86. Select appropriate size, type, and position of bed for patient safety and activity
87. Record condition of the skin or discharges, such as: appearance, odor, color
88. Refer a patient to an outside agency, such as: health, social, religious
89. Clean a discharged patient's unit
90. Record intake and output for an 8 hour or 24 hour period
91. Administer immunization, such as: smallpox, diphtheria, polio, tetanus, T.B., allergy
92. Explain the current condition of a patient to the immediate family
93. Take verbal medication or treatment order from doctor
94. Instill medication for the eye, ear or nose
95. Dust floor in patient's room
96. Instruct paralyzed patient how to establish pattern for habit formation of elimination
97. Refer patient to an agency inside the hospital, such as: social service, chaplain
98. Observe condition of the skin or body discharges, such as: color, odor, appearance
99. Check functioning of tubes for patient with chest tube drainage



## **APPENDIX C**

**Table C-1: Summary of Faculty Card Sorts of 99  
Nursing Functions**

**Table C-2: Faculty Responsibility Sort, by Function,  
for Six Clinical Areas**

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions

Table C-1																	
Summary of Faculty Card Sort																	
of 99 Nursing Functions																	
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
1.+Emph.	148	51	28	10	3	1	1	1	1	1	.72	124	.90	3	1	4	237
-Emph.	67	28	17	7	2	1	1			1							
2.+Emph.		1	1	10	23	53	73	67	14	2	5.85	2	5.00	225	19		1
-Emph.					2												
3.+Emph.	33	54	52	59	28	13	1	3	1		2.24	45	1.60	22	40	73	110
-Emph.	11	12	12	6	2	2											
4.+Emph.	5		6	14	26	58	75	48	11	1	5.45	3	1.33	211	21	2	11
-Emph.	1		2														
5.+Emph.		2	9	39	60	61	41	26	4	2	4.75	7	3.71	141	80	16	8
-Emph.			1	2	3		1										
6.+Emph.	4	12	26	58	69	44	21	7	2	1	3.83	13	2.85	56	66	33	90
-Emph.	1	3	1	2	5		1										
7.+Emph.	52	56	75	36	20	5					1.72	59	1.42	15	55	44	131
-Emph.	20	11	15	10	2	1											
8.+Emph.	4	2	11	33	49	52	42	32	15	4	4.96	6	2.50	151	67	13	14
-Emph.	1	2		1	1		1										

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Table C-1																	
Summary of Faculty Card Sort																	
of 99 Nursing Functions																	
(Continued)																	
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
(N=244)																	
9.+Emph. -Emph.	1	5	33	47	86	54	14	4	4	4.84	2	3.00	205	30	2	8	
10.+Emph. -Emph.	42	45	61	52	12	3	1	1	2.16	54	1.74	14	48	65	118		
11.+Emph. -Emph.	96	60	53	25	5	2	1	1	1.20	113	1.44	2	3	9	231		
12.+Emph. -Emph.	23	25	44	52	39	13	9	3	1	3.17	70	2.90	39	49	55	102	
13.+Emph. -Emph.	1	2	13	42	66	64	17	6	2	4.55	3	2.67	178	50	7	10	
14.+Emph. -Emph.	2	5	21	38	67	74	28	8	1	5.23	13	4.38	109	83	30	23	
15.+Emph. -Emph.	105	74	46	11	4	1	1	1	1.00	92	.93	3	7	40	195		
16.+Emph. -Emph.	7	8	27	57	51	24	7	3	1	3.89	7	2.14	190	44	7	4	

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
17.+Emph. -Emph.	5 2	6 1	23 7	62 5	70 5	42 5	28 5	5 1	2	1	3.92	26	3.35	90	98	30	27
18.+Emph. -Emph.	2 1	5 1	23 4	44 1	68 6	52 1	31 1	9 1	10		4.28	15	3.73	59	60	28	98
19.+Emph. -Emph.	1 1	2 1	9 1	28 1	66 1	75 1	44 1	17 1	1	1	4.68	4	3.75	128	83	23	11
20.+Emph. -Emph.	25 4	40 2	75 6	39 1	40 1	16 2	4 5	5			2.48	16	1.94	195	4		46
21.+Emph. -Emph.	2 1	6 1	27 1	70 1	78 1	38 1	21 1	2			3.74	1	2.00	150	64	10	21
22.+Emph. -Emph.	53 32	23 19	46 32	17 16	16 13	19 19	26 25	10 9	6 4	28 25	3.49	194	3.86	2	3	6	234
23.+Emph. -Emph.	11 4	35 12	57 1	62 12	51 3	22 1	5 1	1			2.81	33	2.03	48	62	23	112
24.+Emph. -Emph.	136 58	57 24	31 20	10 10	6 5	2 2	1 1			1 1	.81	120	1.10	2	5	11	227

(N=244)

(N=245)

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Summary of Faculty Card Sort of 99 Nursing Functions (Continued)																	
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
25.+Emph. -Emph.	1	1	2	8	8	44	58	51	47	28	6.47	5	4.80	113	88	19	25
26.+Emph. -Emph.	3	8	27	38	77	45	34	10	2		4.09	1	3.00	220	18		7
27.+Emph. -Emph.	1	2	21	38	80	62	30	1	6	4	5.27	3	5.00	140	75	11	19
28.+Emph. -Emph.	39	47	69	37	24	11	7	3	3	4	2.34			7	17	43	178
	20	18	26	15	12	6	6	3	2	4		112	2.70				
29.+Emph. -Emph.			1	6	18	18	28	52	51	70	7.18	3	7.00	232	13		
				1					2								
30.+Emph. -Emph.	146	46	34	10	3		3	1		1	.78			4	1	3	237
	59	28	19	8	3		2					119	.96				
31.+Emph. -Emph.	3	7	14	43	49	43	38	21	20	6	4.77	2	0.0	228	12	1	4
	2																
32.+Emph. -Emph.	4	7	23	41	68	54	32	12	3		4.17			101	71	38	35
	2	2	10	7		2	3	1	1			28	3.07				



Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Summary of Faculty Card Sort of 99 Nursing Functions (Continued)																		
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	(N=245)				Never Performed
														Independent	Shared Responsibility	Direct Supervision		
(N=244)																		
33.+Emph. -Emph.	1	2 1	7	19 2	32	68	67 1	26	12	10	5.37	4	3.25	123	94	15	13	
34.+Emph. -Emph.	3	4	4	2	13	15	39	40	66	58	7.00	20	5.25	186	20	1	38	
35.+Emph. -Emph.	3 2	1	6 2	16	37 2	64	63	43	9	2	5.32	6	2.00	106	96	30	13	
36.+Emph. -Emph.			1 1	5	11 1	23	72	70	45 1	17	6.60	3	4.67	202	38	2	3	
37.+Emph. -Emph.	96 34	78 38	39 10	12 4	6 5	4 2	2 1	3 1	3 3	1	1.24	97	1.35	3	22	33	187	
38.+Emph. -Emph.		3 1	3 1	10 2	28 2	50	86 1	45	15	4	5.69	7	3.29	120	78	26	21	
39.+Emph. -Emph.	20 11	33 14	56 17	45 11	33 11	25 11	17 7	6 4	6 5	3 1	3.07	92	3.25	33	60	42	110	
40.+Emph. -Emph.		1	4	22 1	39 2	69 2	55	33	18	3	5.36	5	4.20	157	65	15	8	

Table C-1

Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Summary of Faculty Card Sort of 99 Nursing Functions (Continued)																	
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
41.+Emph. -Emph.	1 1	3 1	14 30	64 1	74 1	41 1	16 1	5.56	3 2.67	210	30	1	4				
42.+Emph. -Emph.	1	2	7	29	42	73 2	60 1	22 1	8	5.97	3 6.67	129	87	20	9		
43.+Emph. -Emph.	6 3	7 3	33 8	59 10	69 14	46 3	17 3	5 3	2 2	3.73	49 3.57	35	77	77	56		
44.+Emph. -Emph.	2 1	3 1	10 23	23 1	56 1	79 2	42 2	21 1	8 1	5.81	6 5.50	184	41	8	12		
45.+Emph. -Emph.	4 3	10 2	22 85	62 1	44 1	16 1	1 1	3.70	6 1.00	54	99	68	24				
46.+Emph. -Emph.	8 1	23 9	46 5	57 9	44 4	31 4	11 3	3 5	2 6	3.58	48 4.27	25	51	87	82		
47.+Emph. -Emph.	78 30	71 35	50 16	36 3	6 1	1 1	1 1	1.33	99 1.32	4	15	31	195				
48.+Emph. -Emph.	1 1	4 1	6 1	9 1	19 1	35 1	42 1	47 40	41 6.41	5 2.60	204	31	5	5			

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Function	(N=244)										Mean Pos. Neg. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	(N=245)			
	0	1	2	3	4	5	6	7	8	9				Independent	Shared Responsibility	Direct Supervision	Never Performed
49.+Emph. -Emph.	4 1	4 1	11 1	25 2	43 4	47 1	42 1	32 1	22 1	14 1	5.27	12	4.42	68	111	42	24
50.+Emph. -Emph.	26 4	59 13	83 10	50 3	16 2	6 2	3 1	1			2.02	32	1.56	90	49	26	80
51.+Emph. -Emph.	8 5	14 3	52 3	72 7	58 2	24 1	11 1	4 1	1		3.23	20	1.90	102	76	33	34
52.+Emph. -Emph.	4 3	6 1	19 3	41 4	68 1	71 2	21 1	12 1	1	1	4.18	16	2.88	75	95	40	35
53.+Emph. -Emph.			1		6	11	24	48	78	76	7.66	2	8.50	233	12		
54.+Emph. -Emph.	67 27	76 15	62 14	23 5	9 4	3 2	2 2	2			1.42	69	1.39	14	55	46	130
55.+Emph. -Emph.	1	2	6	24	28	47	42	53	32	9	5.71			237	6	1	1
56.+Emph. -Emph.				1	3	8	48	53	94	37	7.37			225	19	1	

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Table C-1																	
Summary of Faculty Card Sort																	
of 99 Nursing Functions																	
(Continued)																	
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
57.+Emph. -Emph.			2 1	11	27	51	55	54	36 1	8	6.02	2	5.00	195	43	2	5
58.+Emph. -Emph.	35 6	47 5	69 2	43 3	26 2	15 1	5	3	1 1		2.26	22	1.86	131	5	3	106
59.+Emph. -Emph.	2	6	16 2	45 2	54	71	32	13	5		4.37	4	2.50	81	90	29	45
60.+Emph. -Emph.	18 8	22 8	46 11	74 9	34 6	25 2	14 2	9 2	2		3.11	48	2.44	15	73	66	91
61.+Emph. -Emph.	14 9	22 8	37 16	42 10	47 15	32 5	29 13	12 6	8 4	1 1	3.69	87	3.63	21	74	60	90
62.+Emph. -Emph.		3	10	36	85 1	76 1	24	8	2 1		4.37	3	5.66	146	71	9	19
63.+Emph. -Emph.	64 16	63 25	66 17	32 9	10 1	5 1	2	2 1			1.57	70	1.46	19	9	9	208
64.+Emph. -Emph.	105 42	68 28	47 20	13 7	7 5	2 2	1 1	1			1.03	105	1.19	2	8	22	213

Table C-1

Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Summary of Faculty Card Sort of 99 Nursing Functions (Continued)															Independent (N=244)				Shared Responsibility (N=245)				Direct Supervision	Never Performed
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	12	60	77	96							
65.+Emph. -Emph.	20 9	17 9	47 16	46 10	49 13	19 11	22 11	10 8	8 6	6 4	3.52	97	3.96	226	18	77	96							
66.+Emph. -Emph.			2	14	26 1	36	57	58	42	9	6.13	1	4.00				1							
67.+Emph. -Emph.	9 1	18 1	49 4	74 1	64	26 2	4				3.07	9	2.44	114	70	38	23							
68.+Emph. -Emph.	1	4	2	19	22 1	28	44	42	43	39	6.34	1	4.00	240	4		1							
69.+Emph. -Emph.	3 1	3 1	16 2	41 1	74 1	74	27	5		1	4.22	5	2.20	114	33	9	89							
70.+Emph. -Emph.	6	15 3	41 3	61 2	49 1	42	24	6			3.57	9	2.11	187	24	3	31							
71.+Emph. -Emph.			7 1	19	67	85	38	23	5		4.89	1	2.00	139	70	3	33							
72.+Emph. -Emph.	15 3	21 7	41 6	53 6	47 8	38 4	17 2	7 1	4 2	1	3.41	39	3.18	49	73	77	46							



Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Table C-1																	
Summary of Faculty Card Sort																	
of 99 Nursing Functions																	
(Continued)																	
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
73.+Emph. -Emph.	4 3	6 2	24 3	37 7	38 2	42 1	40 3	31 3	17 3	5	4.77	24	3.50	60	98	46	41
74.+Emph. -Emph.	1 1	1 1	3 1	8	22	45	57	54	30	23	6.19	2	1.00	200	42	2	1
75.+Emph. -Emph.	9 3	24 8	46 5	69 7	42 2	34 3	15 2	3	2		3.23	30	2.47	24	75	98	48
76.+Emph. -Emph.	19 11	22 7	32 13	38 8	40 14	22 6	29 15	17 9	11 6	14 10	4.00	99	4.38	5	49	89	102
77.+Emph. -Emph.			1 1	5	14	24	95	67	34	4	6.31	1	2.00	203	40	2	
78.+Emph. -Emph.	71 18	75 18	69 28	21 5	2	4 1	1		1 1		1.30	71	1.44	12	24	37	172
79.+Emph. -Emph.	23 7	42 15	45 15	49 14	24 7	18 7	17 8	13 8	8 5	5 2	3.14	88	3.55	26	65	57	97
80.+Emph. -Emph.	18 6	21 9	52 13	58 13	54 12	26 7	12 2	1 1	1 1	1 1	3.04	65	2.97	9	45	77	114

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Function	(N=244)										Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
	0	1	2	3	4	5	6	7	8	9							
81.+Emph. -Emph.	4 4	6 3	19 4	33 5	44 1	42 1	41 3	26 2	19 2	10	4.91	23	3.00	63	109	41	32
82.+Emph. -Emph.	6 3	11 1	19 2	36 1	78 1	58	26	7 1	1	2	4.06	9	2.11	72	65	17	91
83.+Emph. -Emph.	3 2	6 1	26 5	49 1	67 5	51 1	33	6 1	2 1	1	4.07	17	3.18	76	96	38	35
84.+Emph. -Emph.	6 3	22 4	45 8	73 6	48 3	29	14	6		1 1	3.29	25	2.36	25	75	60	85
85.+Emph. -Emph.	8	26 2	67 12	72 5	46 1	17 1	7			1 1	2.85	22	2.68	72	91	30	52
86.+Emph. -Emph.	12 3	13 1	61 7	46 5	51 3	26 1	24	6	5		3.41	20	2.35	64	86	42	53
87.+Emph. -Emph.		1		3	13	16 1	45	74	61	31	6.95	1	5.00	220	23		2
88.+Emph. -Emph.	23 6	45 12	74 19	60 10	25 3	12 3	4 1	1			2.31	54	2.09	21	46	76	102

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Function	(N=244)											No. Neg. Resp.	Mean Pos. Emphasis	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision	Never Performed
	0	1	2	3	4	5	6	7	8	9	Emphasis							
89.+Emph. -Emph.	16 3	24 1	32 2	52 3	42 3	30	25	13	8	2 1	3.63	10	2.60		197	6		42
90.+Emph. -Emph.			2	8	23	33	66 1	74 2	32	6	6.18	3	6.67		219	25		1
91.+Emph. -Emph.	31 8	58 23	69 20	31 16	28 8	8	10	4 3	4 3	1 1	2.34	89	2.66		7	27	59	152
92.+Emph. -Emph.	17 11	37 14	46 10	50 21	37 11	15 8	21 14	10 10	6 5	5 5	3.24	109	3.85		10	46	54	135
93.+Emph. -Emph.	29 15	26 16	31 21	24 13	17 10	12 10	32 26	25 21	15 13	33 27	4.39	172	4.87		10	27	19	189
94.+Emph. -Emph.	2	5	20	53	63	49	35	8	6	3	4.27	12	2.33		79	107	33	26
95.+Emph. -Emph.	53 15	54 6	68 10	39 5	16 1	9	2	2	1		1.84	37	1.22		96	2	2	145
96.+Emph. -Emph.	7 1	4 2	37	67	57	46	18	6	1	1	3.70	10	2.40		56	87	51	51

Table C-1  
Summary of Faculty Card Sort  
of 99 Nursing Functions  
(Continued)

Summary of Facility Card Sort of 99 Nursing Functions (Continued)														(N=244)				(N=245)				Never Performed
Function	0	1	2	3	4	5	6	7	8	9	Mean Pos. Emphasis	No. Neg. Resp.	Mean Neg. Emphasis	Independent	Shared Responsibility	Direct Supervision						
97.+Emph. -Emph.	11	26 8	76 12	69 9	36 4	19	7				2.73	33	2.27	50	57	74	64					
98.+Emph. -Emph.				2	8	20	38 1	61 1	61	54	7.24	2	6.50	223	20		2					
99.+Emph. -Emph.	5	5	12	40 1	49 1	64 2	37	20	9 1	3 1	4.61	6	5.67	35	97	73	40					

Table C-2

**Faculty Responsibility Sort by Function  
for Six Clinical Areas**

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	N Z	0 0	0 0	1 3	28 97	2 5	0 0	1 3	37 92	1 1	0 0	2 2	88 97	0 0	1 2	0 0	40 98	0 0	0 0	0 0	40 100	0 0	0 0	0 0	4 100
2	N Z	25 86	4 14	0 0	0 0	39 97	1 3	0 0	0 0	84 92	7 8	0 0	0 0	38 93	2 5	0 2	1 2	36 90	4 10	0 0	0 0	3 75	1 25	0 0	0 0
3	N Z	5 17	8 28	13 45	3 10	2 5	3 8	4 10	31 78	3 3	15 16	32 36	41 45	11 27	10 24	13 32	7 17	1 3	3 8	11 26	25 64	0 0	1 25	0 0	3 75
4	N Z	27 93	2 7	0 0	0 0	37 93	3 8	0 0	0 0	78 84	9 10	1 1	5 5	34 83	2 5	0 12	5 34	4 18	1 4	1 3	1 3	3 75	1 25	0 0	0 0
5	N Z	18 62	7 24	4 14	0 0	35 88	5 13	0 0	0 0	48 52	38 41	4 5	1 1	20 49	11 27	3 7	7 17	18 46	4 8	0 0	2 50	1 25	1 25	0 0	0 0
6	N Z	10 35	9 31	9 31	1 3	6 15	3 8	1 3	30 75	15 16	23 30	11 13	37 40	22 54	17 42	1 2	1 2	3 8	8 21	10 23	19 49	0 0	1 25	1 25	2 50
7	N Z	3 10	5 17	3 10	18 62	5 13	14 35	8 20	13 33	2 2	20 22	15 16	54 60	1 2	8 20	8 20	24 59	3 8	7 18	10 26	20 49	1 25	1 25	0 0	2 50
8	N Z	14 49	12 41	3 10	0 0	31 78	6 15	1 3	2 5	55 61	28 30	7 8	1 1	25 61	9 22	1 2	6 15	22 54	12 31	1 3	5 13	4 100	0 0	0 0	0 0
9	N Z	24 83	4 14	1 3	0 0	33 83	4 10	0 0	3 8	82 90	8 9	1 1	0 0	34 83	2 5	0 12	5 72	29 72	11 28	0 0	0 0	3 75	1 25	0 0	0 0
10	N Z	3 10	5 17	14 48	7 24	2 5	5 13	3 8	30 75	2 2	17 20	25 27	47 51	7 17	15 37	14 34	5 12	0 0	5 10	9 23	26 67	0 25	1 0	0 75	3 0

\* Level of Responsibility for Performance.

\*\*N=Number of faculty members who had this reference basis for performing the card sort.



Table C-2

Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
11	N	1	1	0	27	1	0	3	36	0	1	4	86	0	1	0	40	0	0	1	39	0	0	1	3
	Z	3	3	0	93	3	0	8	90	0	1	4	95	0	2	0	98	0	0	3	97	0	0	25	75
12	N	3	6	11	9	18	8	7	7	12	22	19	38	3	5	7	26	2	8	11	19	1	0	0	3
	Z	10	21	38	31	45	20	18	18	13	24	21	42	7	12	17	63	5	20	28	46	25	0	0	75
13	N	19	10	0	0	33	4	1	2	72	16	3	0	22	10	1	8	29	9	2	0	3	1	0	0
	Z	66	35	0	0	83	10	3	5	79	17	3	0	54	24	2	20	72	23	5	0	75	25	0	0
14	N	11	12	3	3	25	9	1	5	34	38	10	9	19	11	5	6	17	13	10	0	3	0	1	0
	Z	38	41	10	10	63	23	3	13	37	41	12	10	46	27	12	15	44	33	23	0	75	0	25	0
15	N	0	1	7	21	1	2	11	26	0	2	8	81	1	1	6	33	1	1	7	31	0	0	1	3
	Z	0	3	24	72	3	5	28	65	0	2	9	89	2	2	15	81	3	3	18	77	0	0	25	75
16	N	21	8	0	0	33	7	0	0	75	12	3	1	31	5	2	3	26	12	2	0	4	0	0	0
	Z	72	28	0	0	83	18	0	0	82	14	3	1	76	12	5	7	67	28	5	0	100	0	0	0
17	N	10	14	2	3	17	17	4	2	31	38	13	9	20	17	2	2	11	11	9	9	1	1	0	2
	Z	35	48	7	10	43	43	10	5	35	41	14	10	49	42	5	5	26	28	23	23	25	25	0	50
18	N	8	14	5	2	5	2	1	32	15	25	13	38	26	13	2	0	5	5	7	23	0	1	0	3
	Z	28	48	17	7	13	5	3	80	16	27	15	41	63	32	5	0	13	13	15	59	0	25	0	75
19	N	14	12	2	1	32	6	1	1	43	37	11	0	22	13	3	2	14	12	6	7	3	1	0	0
	Z	48	41	7	3	80	15	3	3	47	41	12	0	54	34	7	5	36	31	15	18	75	25	0	0
20	N	26	0	0	3	33	0	0	7	72	2	0	17	29	1	0	11	31	1	0	8	4	0	0	0
	Z	90	0	0	10	83	0	0	18	78	2	0	20	71	2	0	27	80	3	0	18	100	0	0	0
* Level of Responsibility for Performance																									

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

**Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)**

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
21	N Z	19 66	7 24	3 10	0 0	30 75	7 18	0 0	3 8	57 62	28 32	4 4	2 2	21 51	5 12	1 2	14 34	21 54	15 36	2 5	2 5	2 5	2 5	2 5	0 0
22	N Z	0 0	0 0	0 0	29 100	2 5	1 3	3 8	34 85	0 0	1 1	1 1	89 98	0 0	1 2	0 0	40 98	0 0	0 0	2 5	38 95	0 0	0 0	0 0	4 100
23	N Z	5 17	12 41	5 17	7 24	4 10	4 10	1 3	31 78	16 17	20 22	7 8	48 53	14 34	16 39	3 7	8 20	8 21	9 23	7 18	16 39	1 25	1 25	0 0	2 50
24	N Z	0 0	1 3	2 7	26 90	2 5	1 3	1 3	36 90	0 0	2 2	5 5	84 92	0 0	1 2	0 0	40 98	0 0	0 0	3 8	37 92	0 0	0 0	0 0	4 100
25	N Z	9 31	14 48	6 21	0 0	13 33	9 23	1 3	17 43	40 44	35 43	9 10	6 7	26 63	12 29	1 2	2 5	23 59	15 36	2 5	2 0	2 50	2 50	0 0	0 0
26	N Z	28 97	1 3	0 0	0 0	40 100	0 0	0 0	0 0	81 88	3 13	0 0	2 2	34 83	2 5	0 0	5 12	33 85	7 15	0 0	0 0	4 100	0 0	0 0	0 0
27	N Z	15 52	12 41	2 7	0 0	25 63	8 20	0 0	7 18	57 62	29 33	4 4	1 1	15 37	15 37	2 5	9 22	27 69	11 26	2 5	0 0	1 25	1 0	2 25	50 50
28	N Z	0 0	1 3	6 20	22 76	1 3	9 23	9 23	21 53	4 4	4 4	19 21	64 71	2 5	2 5	4 10	33 81	0 0	1 3	5 13	34 85	0 0	0 0	4 100	0 0
29	N Z	27 93	2 7	0 0	0 0	40 100	0 0	0 0	0 0	88 97	3 3	0 0	0 0	37 90	4 10	0 0	0 0	36 90	4 10	0 0	0 0	4 100	0 0	0 0	0 0
30	N Z	0 0	0 0	0 0	29 100	2 5	1 3	2 5	35 88	1 1	0 0	0 0	90 99	0 0	0 0	0 0	41 100	1 3	0 0	1 3	38 95	0 0	0 0	4 100	0 0

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
31	N 25 Z 86	3	0	0	1	39	0	0	1	85	4	1	1	40	0	0	1	35	5	0	9	4	0	0	0
32	N 9 Z 31	6	9	31	17	29	9	2	0	35	33	13	10	14	11	5	11	13	10	8	9	1	2	1	0
33	N 14 Z 48	14	1	3	0	24	10	1	5	43	39	8	1	18	15	2	6	22	15	2	1	2	1	1	0
34	N 20 Z 69	3	0	0	6	31	1	0	8	71	7	0	13	35	3	1	2	26	6	0	8	3	0	0	1
35	N 12 Z 41	12	5	17	0	21	15	1	3	41	33	15	2	19	15	3	4	11	20	5	4	2	1	1	0
36	N 21 Z 72	6	2	7	0	36	3	0	1	79	12	0	0	30	9	0	2	32	8	0	0	4	0	0	0
37	N 0 Z 0	4	4	14	21	1	3	9	27	1	5	11	74	1	6	5	29	0	3	3	34	0	1	1	2
38	N 13 Z 45	15	1	3	0	27	8	3	2	45	30	10	6	22	11	4	4	12	13	7	8	1	1	1	1
39	N 5 Z 17	5	5	17	14	7	10	5	18	14	21	17	39	4	13	8	16	2	9	7	22	1	2	0	1
40	N 19 Z 66	10	0	0	0	27	9	1	3	59	24	6	2	25	10	3	3	23	12	5	0	3	1	0	0
		35	0	0	0	68	23	3	8	65	26	7	2	61	24	7	7	58	30	13	0	75	25	0	0

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

**Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)**

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
41	N	24	5	0	0	33	5	0	2	82	7	1	1	38	2	0	1	30	10	0	0	2	1	0	1
	Z	83	17	0	0	83	13	0	5	90	8	1	1	93	5	0	2	75	25	0	0	50	25	0	25
42	N	17	11	1	0	28	8	3	1	48	33	9	1	23	16	1	1	11	17	5	7	2	1	1	0
	Z	59	38	3	0	70	20	8	3	53	36	10	1	56	39	2	2	28	43	13	18	50	25	25	0
43	N	2	13	11	3	9	12	11	8	15	31	31	14	3	10	8	20	6	10	14	10	0	1	1	2
	Z	7	45	38	10	23	30	28	20	17	34	34	15	7	24	20	49	15	25	35	25	25	25	50	0
44	N	20	8	1	0	32	6	1	1	70	14	4	3	29	5	1	6	29	8	1	2	3	1	0	0
	Z	69	28	3	0	80	15	3	3	77	15	4	3	71	12	2	15	73	20	3	5	75	25	0	0
45	N	3	15	11	0	8	12	10	10	24	41	25	1	9	12	7	13	10	17	12	1	0	1	3	0
	Z	10	52	38	0	20	30	25	25	26	45	28	1	22	29	17	32	25	43	30	3	0	25	75	0
46	N	2	5	15	7	4	13	10	13	7	18	36	30	8	6	8	19	3	7	18	12	1	2	0	1
	Z	7	17	52	24	10	33	25	33	8	20	40	33	20	15	20	46	8	18	45	30	25	50	0	25
47	N	0	2	3	24	1	1	3	35	1	3	10	77	2	6	13	20	0	3	3	34	0	0	0	4
	Z	0	7	10	83	3	3	8	88	1	3	11	85	5	15	32	49	0	8	8	85	0	0	0	100
48	N	24	4	1	0	32	5	2	1	76	13	1	1	36	2	1	2	32	7	0	1	4	0	0	0
	Z	83	14	3	0	80	13	5	3	84	14	1	1	88	5	2	5	80	18	0	3	100	0	0	0
49	N	4	17	6	2	21	11	5	3	21	47	17	6	14	18	5	4	6	16	9	9	2	2	0	0
	Z	14	59	21	7	53	28	13	8	23	52	19	7	34	44	12	10	15	40	23	23	50	50	0	0
50	N	13	8	2	6	17	6	5	12	25	16	11	38	22	12	2	5	12	6	5	17	1	0	1	2
	Z	45	28	7	21	43	15	13	30	28	18	12	42	54	29	5	12	30	15	13	43	25	0	25	50

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
51	N	12	12	2	3	22	9	2	7	33	32	14	12	20	12	5	4	13	9	9	9	1	2	1	0
	Z	41	41	7	10	55	23	5	18	36	35	15	13	49	29	12	10	33	23	23	23	25	50	25	0
52	N	9	9	10	1	14	17	1	8	31	39	16	5	9	13	3	16	11	14	10	5	2	2	0	0
	Z	31	31	35	3	35	43	3	20	34	43	18	6	22	32	7	39	28	35	25	13	50	50	0	0
53	N	26	3	0	0	40	0	0	0	88	3	0	0	38	3	0	0	36	4	0	0	4	0	0	0
	Z	90	10	0	0	100	0	0	0	97	3	0	0	93	7	0	0	90	10	0	0	100	0	0	0
54	N	1	7	6	15	10	12	8	10	3	17	17	54	1	9	8	23	0	8	6	26	0	2	0	2
	Z	3	24	21	52	25	30	20	25	3	19	19	59	2	22	20	56	0	20	15	65	0	50	0	50
55	N	27	2	0	0	40	0	0	0	89	2	0	0	39	1	0	1	37	2	1	0	4	0	0	0
	Z	93	7	0	0	100	0	0	0	98	2	0	0	95	2	0	2	93	5	3	0	100	0	0	0
56	N	26	3	0	0	39	1	0	0	83	8	0	0	38	3	0	0	35	4	1	0	3	1	0	0
	Z	90	10	0	0	98	3	0	0	91	8	0	0	93	7	0	0	88	10	3	0	75	25	0	0
57	N	19	9	0	1	39	1	0	0	72	16	2	1	33	4	0	4	28	12	0	0	3	1	0	0
	Z	66	31	0	3	98	3	0	0	79	18	2	1	81	10	0	10	70	30	0	0	75	25	0	0
58	N	16	0	1	12	26	0	0	14	45	2	3	41	20	0	0	21	20	3	0	17	3	0	0	1
	Z	55	0	3	41	65	0	0	35	50	2	3	45	49	0	0	51	50	8	0	43	75	0	0	25
59	N	7	15	7	0	13	14	1	12	38	36	11	6	9	9	3	20	14	14	7	5	1	1	0	2
	Z	24	52	24	0	33	35	3	30	42	40	12	7	22	22	7	49	35	35	18	13	25	25	0	50
60	N	0	9	10	10	6	11	9	14	3	31	28	29	3	12	9	17	2	11	9	18	1	0	0	3
	Z	0	31	35	35	15	28	23	35	3	34	31	32	7	30	22	42	5	28	23	45	25	0	0	75

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.



Table C-2

**Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)**

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=29				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
61	N Z	2 7	9 31	6 21	12 41	5 13	15 38	9 23	11 28	5 6	34 37	24 26	28 31	6 15	12 29	10 24	13 32	3 8	2 5	11 28	24 60	0 0	1 25	0 0	3 75
62	N Z	14 48	13 45	2 7	0 0	23 58	12 30	0 0	5 13	62 68	24 26	5 6	0 0	22 54	7 17	1 2	11 27	1 3	15 38	1 3	1 25	1 25	0 0	1 25	2 50
63	N Z	3 10	2 7	1 3	23 79	5 13	2 5	0 0	33 83	6 7	1 1	5 6	79 87	2 5	0 0	1 2	38 93	3 8	4 10	2 5	31 78	1 25	0 0	0 0	3 75
64	N Z	0 0	0 0	3 10	26 90	2 5	3 8	4 10	31 78	1 1	1 1	5 6	84 92	0 0	2 5	4 10	35 85	0 0	0 0	4 10	36 90	0 0	2 50	1 25	1 25
65	N Z	1 3	9 31	8 28	11 38	1 3	10 25	9 23	20 50	3 3	18 20	35 39	35 39	3 7	16 39	8 20	14 34	4 10	6 15	16 40	14 35	0 0	0 0	1 25	3 75
66	N Z	24 82	5 17	0 0	0 0	40 100	0 0	0 0	0 0	87 96	3 3	0 0	1 1	36 88	5 12	0 0	0 0	35 88	5 13	0 0	0 0	4 100	0 0	0 0	0 0
67	N Z	15 52	6 21	7 24	1 3	22 55	12 30	4 10	2 5	46 51	30 33	12 13	3 3	12 29	8 20	6 15	15 37	16 40	13 33	9 23	2 5	3 75	1 25	0 0	0 0
68	N Z	28 97	1 3	0 0	0 0	40 100	0 0	0 0	0 0	90 99	1 1	0 0	0 0	40 98	0 0	0 2	1 2	38 95	2 5	0 0	0 0	4 100	0 0	0 0	0 0
69	N Z	18 62	6 21	4 14	1 3	8 20	2 5	0 0	30 75	38 42	15 17	2 2	36 40	37 90	4 10	0 0	0 0	12 30	5 13	3 8	20 50	1 25	1 25	0 0	2 50
70	N Z	22 76	3 10	0 0	4 14	34 85	2 5	0 0	4 10	67 74	7 8	2 2	14 16	29 71	6 15	0 0	6 15	31 78	5 13	1 3	3 8	3 75	1 25	0 0	0 0

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=29				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
71	N Z	21 72	8 28	0 0	0 0	28 70	10 25	0 0	2 5	57 63	31 34	1 1	2 2	20 49	9 22	0 0	12 29	9 23	13 33	1 3	17 43	3 75	0 0	1 25	0 0
72	N Z	4 14	8 28	11 38	6 21	10 25	14 35	12 30	4 10	18 20	28 31	26 29	19 21	8 20	15 37	9 22	9 22	7 18	8 20	17 43	8 20	2 50	0 0	1 25	1 25
73	N Z	7 24	15 52	3 10	4 14	18 45	11 28	8 20	3 8	19 21	44 48	18 20	10 11	12 29	16 39	7 17	6 15	3 8	11 28	10 25	16 40	1 25	1 25	0 0	2 50
74	N Z	21 72	8 28	0 0	0 0	34 85	6 15	0 0	0 0	76 84	14 15	1 1	0 0	32 78	8 20	1 2	0 0	33 83	7 18	0 0	0 0	3 75	0 0	0 0	1 25
75	N Z	2 7	10 35	14 48	3 10	1 3	9 23	14 35	16 40	8 9	29 32	38 42	16 18	9 22	16 39	12 29	4 10	4 10	18 25	8 45	1 20	1 25	0 0	2 50	1 25
76	N Z	0 0	4 14	9 31	16 55	0 0	12 20	17 43	11 28	2 2	14 15	32 35	43 47	4 10	13 32	15 36	9 22	0 0	5 13	13 33	22 55	0 0	1 25	2 50	1 25
77	N Z	23 79	6 21	0 0	0 0	38 95	2 5	0 0	0 0	78 86	12 13	1 1	0 0	31 76	10 24	0 0	0 0	30 75	9 23	1 3	0 0	3 75	1 25	0 0	0 0
78	N Z	0 0	5 17	3 10	21 72	4 10	3 8	8 20	25 63	7 7	8 9	10 11	66 73	1 2	5 12	5 12	30 73	0 0	2 5	9 23	29 73	0 0	1 25	1 25	2 50
79	N Z	0 0	12 41	2 7	15 52	11 28	15 38	9 23	5 13	8 9	16 18	27 30	40 44	4 10	16 39	7 17	14 34	2 5	5 13	9 23	24 60	1 25	1 25	2 50	0 0
80	N Z	2 7	5 17	8 28	14 48	4 10	9 23	9 23	18 45	1 1	21 23	27 30	42 46	2 5	8 20	14 34	17 42	0 0	2 5	18 45	20 50	0 0	0 0	2 50	2 50

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

**Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)**

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4				
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
81	N	5	18	4	2	18	14	5	3	18	47	20	6	15	17	5	4	6	12	6	16	1	1	1	1	
	Z	17	62	14	7	45	35	13	8	20	52	22	7	37	42	12	10	15	30	15	40	25	25	25	25	
82	N	14	12	1	2	4	2	3	31	19	27	8	37	25	14	1	1	8	11	4	17	1	0	0	3	
	Z	48	41	3	7	10	5	8	78	21	30	9	41	61	34	2	2	20	28	10	43	25	0	0	75	
83	N	8	12	5	4	15	15	6	4	30	39	15	7	16	9	6	10	7	18	5	10	1	2	1	0	
	Z	28	41	17	14	38	38	15	10	33	43	17	8	39	22	15	24	18	45	13	25	25	50	25	0	
84	N	2	5	12	10	8	14	10	8	8	29	23	31	4	14	9	14	3	13	5	19	0	0	1	3	
	Z	7	18	41	35	20	35	25	20	9	32	25	34	10	34	22	34	8	33	13	48	0	0	0	25	75
85	N	6	12	6	5	21	14	2	3	21	37	11	22	14	16	1	10	8	11	9	12	2	1	1	0	
	Z	21	41	21	17	53	35	5	8	23	41	12	24	34	39	2	24	20	28	23	30	50	25	25	0	
86	N	5	10	7	7	13	13	7	7	27	31	13	20	9	12	7	13	7	20	7	6	3	0	1	0	
	Z	17	35	24	24	33	33	18	18	30	34	14	22	22	29	17	32	18	50	18	15	75	0	25	0	
87	N	26	3	0	0	38	2	0	0	81	9	0	1	36	4	0	1	35	5	0	0	4	0	0	0	
	Z	90	10	0	0	95	5	0	0	89	10	0	1	88	10	0	2	88	13	0	0	100	0	0	0	
88	N	0	7	9	13	7	3	15	15	8	20	25	38	2	11	13	15	3	5	13	19	1	0	1	2	
	Z	0	24	31	45	18	8	38	38	9	22	28	42	5	27	32	37	8	13	33	48	25	0	25	50	
89	N	26	1	0	2	32	0	0	8	77	1	0	13	30	2	0	9	29	2	0	9	3	0	0	1	
	Z	90	3	0	7	80	0	0	20	85	1	0	14	73	5	0	22	73	5	0	23	75	0	0	25	
90	N	26	3	0	0	39	1	0	0	78	13	0	0	36	4	0	1	35	5	0	0	4	0	0	0	
	Z	90	10	0	0	98	3	0	0	86	14	0	0	88	10	0	2	88	13	0	0	100	0	0	0	

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

Table C-2

Faculty Responsibility Sort by Function  
for Six Clinical Areas  
(Continued)

Function	Value	General Duty N=29**				Geriatrics N=40				Medical- Surgical N=92				Obstetrics- Gynecology N=41				Pediatrics N=39				Psychiatric N=4			
		1*	2*	3*	4*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
91	N	1	0	11	17	1	5	9	25	2	12	23	54	3	5	6	27	0	4	9	27	0	1	1	2
	%	3	0	38	59	3	13	23	63	2	13	25	59	7	12	15	66	0	10	23	68	0	25	25	50
92	N	0	3	6	20	5	14	8	13	2	16	18	55	0	8	14	19	2	4	7	27	1	1	0	2
	%	0	10	20	69	13	35	20	33	2	17	20	60	0	20	34	46	5	10	18	68	25	25	0	50
93	N	1	4	0	24	5	7	4	24	2	7	6	76	1	5	3	32	1	3	4	32	0	1	1	2
	%	3	14	0	83	13	18	10	60	2	8	7	83	2	12	7	78	3	8	10	80	0	25	25	50
94	N	9	15	4	1	21	16	2	1	25	48	15	3	15	10	7	9	8	15	5	12	1	3	0	0
	%	31	52	14	3	53	40	5	3	28	53	17	3	37	24	17	22	20	38	13	30	25	75	0	0
95	N	13	0	0	16	16	0	0	24	31	1	1	58	15	0	1	25	17	1	0	22	3	0	0	1
	%	45	0	0	55	40	0	0	60	34	1	1	64	37	0	2	61	43	3	0	55	75	0	0	25
96	N	3	10	10	6	16	18	3	3	24	35	22	10	3	12	4	22	8	11	11	10	2	1	1	0
	%	10	35	35	21	40	45	8	8	26	39	24	11	7	29	10	54	20	28	28	25	50	25	25	0
97	N	3	7	12	7	12	8	9	11	16	22	30	23	9	12	12	8	8	8	10	14	2	0	1	1
	%	10	24	41	24	30	20	23	28	18	24	33	25	22	29	29	20	20	20	25	35	50	0	25	25
98	N	28	1	0	0	38	2	0	0	81	8	0	2	39	2	0	0	33	7	0	0	4	0	0	0
	%	97	3	0	0	95	5	0	0	89	9	0	2	95	5	0	0	83	18	0	0	100	0	0	0
99	N	3	15	11	0	6	11	9	14	10	49	29	3	4	12	7	18	11	11	16	2	0	0	1	3
	%	10	52	38	0	15	28	23	35	11	54	32	4	10	29	17	44	28	28	40	5	0	0	25	75

\* Level of Responsibility for Performance.

\*\* N=Number of faculty members who had this reference basis for performing the card sort.

## APPENDIX D

**Table D-1: Verimax Rotated Factor Matrix for the Faculty Sort of 99 Nursing Functions**

**Table D-2 through D-15:**  
Responsibility Level for Nursing Functions as Determined by Employed LPN's, Their RN Supervisors, and RN Faculty Members; Importance of Functions as Determined by Employed LPN's and Emphasis Given Functions by RN Faculty Members; Grouped as follows:

**Table D-2: Factor I-A; Routine, supportive and personal care functions**

**Table D-3: Factor I-B; Specialized functions, OR or Emergency Room**

**Table D-4: Factor II; Administration of medications**

**Table D-5: Factor III-A; Basic nursing in institutional setting**

**Table D-6: Factor III-B; Basic nursing as an intermediary or extension of physicians**

**Table D-7: Factor IV; Maternity**

**Table D-8: Factor V-A; Simple nursing care**

**Table D-9: Factor V-B; Surgical**

**Table D-10: Factor VI-A; Patient activities**

**Table D-11: Factor VI-B; Patient - institutional**

**Table D-12: Factor VII; Genito-urinary**

**Table D-13: Factor VIII-A; Technical nursing skills - intravenous, etc.**

**Table D-14: Factor VIII-B; Technical nursing skills - physical and mental rehabilitation**

**Table D-15: Factor IX; Non-nursing patient services**



Table D-1

VERIMAX ROTATED FACTOR MATRIX FOR THE  
FACULTY SORT OF 99 NURSING FUNCTIONS

Function Number	Nine Factors and Factor Loadings								
	1	2	3	4	5	6	7	8	9
1	-.142	-.050	-.140	-.089	-.056	.085	.004	.628	.086
2	.224	.258	.348	.245	.031	-.066	-.082	-.051	-.143
3	.093	-.094	-.158	-.220	.032	.257	.187	.162	.004
4	.142	.139	.230	.109	.226	-.015	-.030	-.107	.039
5	.221	.351	.094	-.030	-.074	-.052	-.285	.063	-.103
6	-.003	-.045	-.056	-.022	.120	.568	.150	.009	.049
7	.150	.195	-.005	.264	.002	.030	-.079	.060	.039
8	-.020	.173	-.342	.204	-.052	-.029	-.322	.016	-.043
9	.146	.202	.174	.026	.331	-.024	-.042	-.078	-.077
10	-.022	-.019	.097	-.201	-.022	.319	.147	.088	.080
11	-.049	.087	-.059	.044	-.064	-.056	-.007	.534	.032
12	-.261	-.147	-.128	-.262	-.014	.004	.037	.035	-.143
13	.208	.177	.028	.239	-.129	-.176	-.191	-.156	-.006
14	-.096	.050	.173	.188	.229	.149	.283	-.015	.050
15	.251	-.070	-.100	-.062	-.004	-.051	.050	.068	.445
16	.225	.136	.005	.199	.030	-.187	-.249	-.023	.008
17	-.214	-.036	-.034	-.109	.062	-.110	.347	-.120	.027
18	-.210	-.002	-.113	.043	.097	.636	-.017	.037	-.021
19	.115	-.367	.070	-.112	.336	-.072	.077	-.108	-.179
20	.620	.107	.098	.014	-.083	.082	-.003	-.083	.038
21	.323	.135	.122	.055	.110	-.031	-.070	.150	-.104
22	-.480	-.044	-.142	-.398	-.250	-.212	-.029	-.067	-.066
23	.197	-.148	-.069	-.074	-.136	.351	-.043	.044	-.119
24	-.186	.049	-.006	-.049	.012	.055	.019	.553	.092
25	-.277	.175	-.233	.173	.199	.278	.042	-.087	-.007
26	.468	.225	.284	.072	-.086	-.151	-.196	-.058	-.061
27	.058	.264	-.063	-.057	.307	.173	-.050	.005	-.050
28	-.356	-.021	.018	-.346	-.108	-.061	-.015	.174	-.005
29	.203	.094	.641	.062	-.109	-.191	-.222	-.037	-.175
30	-.002	-.053	-.069	-.016	-.113	.042	-.027	.227	.516
31	.321	.196	.164	.147	-.198	-.067	-.400	-.077	-.069
32	-.092	-.026	.035	-.180	.211	-.082	-.154	-.099	-.086
33	-.075	-.100	-.219	.213	.171	.315	.027	-.017	.102
34	-.056	.003	.057	.202	-.154	.018	.093	-.266	-.194
35	-.085	-.100	-.027	.005	.440	.051	.078	-.049	-.136
36	-.075	.178	-.005	.387	-.166	.010	.110	-.034	-.097
37	-.002	-.022	-.073	-.214	-.001	-.061	.128	.018	.436
38	-.162	-.196	-.005	.025	.690	-.055	.125	.037	-.033
39	-.318	-.010	-.092	-.091	-.076	-.058	.186	.036	-.163
40	-.008	.179	-.009	.005	.180	-.028	.299	.099	.050

Table D-1  
(Cont'd)

Function Number	Nine Factors and Factor Loadings								
	1	2	3	4	5	6	7	8	9
41	-.038	.270	.153	.285	-.028	-.002	-.049	-.202	.031
42	-.122	-.247	.015	-.027	.721	.058	.114	-.028	.021
43	-.127	.180	-.329	-.027	-.049	-.030	.036	.015	-.075
44	.018	.133	.072	.130	-.081	-.141	-.270	.046	-.073
45	-.027	-.003	-.001	.174	.025	.008	.391	.140	-.147
46	-.274	.010	-.242	-.182	.045	.119	-.009	.079	.080
47	.054	.147	.032	.017	-.126	.090	.099	-.040	.283
48	-.047	.157	.095	.270	-.083	.135	.031	-.093	.005
49	-.187	-.804	-.005	-.074	.156	.135	-.021	-.059	.053
50	.409	-.079	.079	.022	-.091	.104	.111	.175	.119
51	.196	-.053	.022	-.024	-.006	-.111	.154	-.010	.026
52	.130	.228	-.253	-.122	.225	.085	-.065	.043	-.132
53	.072	.250	.597	-.004	.124	.022	.088	-.106	-.126
54	.037	-.026	.004	.054	-.122	-.038	-.077	.016	.475
55	.335	.259	.479	.145	-.026	-.191	-.385	.064	.037
56	-.019	.223	.529	.065	.163	-.007	.190	-.080	-.127
57	-.037	.154	.008	.185	-.112	-.030	-.495	-.002	.019
58	.567	.068	-.056	-.018	-.159	.047	-.048	-.283	.058
59	-.006	.063	-.178	.004	.318	-.041	.166	.085	-.054
60	-.161	-.267	-.153	-.184	-.076	-.245	.223	-.105	-.031
61	-.351	-.141	-.101	-.326	-.106	-.106	.262	-.062	-.053
62	.224	.256	-.051	.113	.163	-.003	.053	-.085	.110
63	.344	.058	-.109	-.070	.103	-.053	-.176	-.013	.052
64	-.100	.102	.036	.092	-.030	-.175	-.053	-.005	.477
65	-.316	-.001	-.181	-.389	-.227	-.157	.121	-.029	.200
66	.321	.142	.394	.226	-.110	-.127	-.327	.004	-.129
67	.110	.149	-.171	.197	.198	-.172	.059	.158	-.034
68	.180	.200	.652	-.065	-.048	-.011	-.190	-.023	-.042
69	.142	.069	-.045	-.019	.057	.635	-.108	-.139	-.148
70	.347	.117	.213	.250	-.064	-.199	-.142	-.078	-.214
71	.051	-.058	.108	-.007	.446	.123	.080	.046	-.037
72	-.060	.036	-.116	.110	-.333	-.031	.078	-.003	.010
73	-.097	-.821	-.062	-.179	.006	.016	.098	-.103	.080
74	.072	-.018	.283	.278	.096	.078	-.006	-.056	-.061
75	-.070	-.075	-.116	-.001	-.118	.118	.333	.082	.139
76	-.261	-.338	-.088	-.341	-.131	.020	.010	-.167	-.042
77	.164	.192	.433	-.017	.231	-.142	-.030	-.100	.047
78	.129	-.016	-.043	.004	.006	.089	.164	.562	.026
79	-.351	-.307	-.015	-.309	-.180	-.110	.080	.023	.028
80	-.140	.056	-.177	.092	-.017	-.128	-.101	.010	.022
81	-.043	-.827	-.017	-.147	.120	.039	.073	-.032	.061
82	.051	-.022	.116	.071	-.049	.573	.018	.134	-.074
83	.003	-.424	-.230	-.180	.163	.093	.199	.022	-.133
84	-.009	-.016	-.187	.267	-.142	-.130	-.090	.020	-.145
85	.020	.044	.039	.100	-.193	-.124	.232	.147	-.093

Table D-1  
(Cont'd)

Function Number	Nine Factors and Factor Loadings								
	1	2	3	4	5	6	7	8	9
86	.216	.046	-.027	.303	-.202	-.085	-.147	.098	-.095
87	.065	.181	.122	.308	-.136	-.109	-.126	-.242	-.314
88	-.094	.063	-.055	.478	-.044	-.222	-.040	.002	-.037
89	.593	.027	.171	-.150	-.062	-.022	-.129	-.073	-.062
90	.078	.303	.204	.161	.148	-.149	-.153	-.108	-.051
91	-.097	-.151	-.111	-.428	-.080	-.193	.076	.103	.087
92	-.477	.016	-.203	.053	-.195	-.016	-.048	-.039	.112
93	-.518	-.137	-.179	-.315	-.331	-.091	-.049	-.125	.069
94	-.003	-.627	-.167	-.163	.191	.028	.079	.107	-.084
95	.560	.107	-.012	.019	-.235	.013	-.039	-.140	.192
96	.198	.116	-.300	-.003	-.008	-.119	.024	.027	-.170
97	-.021	.023	-.093	.492	-.107	-.164	-.054	.062	.232
98	-.046	.229	.068	.296	-.124	-.126	-.212	-.219	-.337
99	-.275	.208	-.312	-.020	.128	.043	.148	-.108	.096

TABLE D-2

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	$\bar{X}$ Emph.	$\bar{X}$ Emph.
Factor I-A: Routine, supportive & (Reported by percents) personal care functions																	
89	Clean a discharged patient's unit	67	3	1	29	64	7	0	29	80	3	0	17	3.14	3.63	10	2.60
68	Make occupied or unoccupied beds, such as: open, closed, surgical, open-toed	86	3	0	11	89	7	0	4	98	2	0	1	4.160	6.34	1	4.00
20	Wash drinking or medicine glasses in kitchenette on nursing unit	59	0	0	41	68	3	0	29	80	2	0	19	2.69	2.48	16	1.94
31	Regulate temperature or ventilation in patient's room	82	5	0	13	82	18	0	0	93	5	1	2	4.32	4.77	2	0.0
58	Disinfect bath-room and toilet	37	1	0	62	39	14	0	47	54	2	1	43	2.11	2.26	22	1.86
Sub-Mean 1		66	2	1	31	68	10	0	22	81	3	1	16	3.27	3.90	10	2.08

TABLE D-2 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph.	$\bar{X}$ -Emph.
(Reported by percents)																	
70	Prepare and serve between-meal nourishment	54	6	1	39	64	14	0	22	76	10	1	13	3.20	3.57	9	2.11
55	Prepare and position patient to eat	86	3	0	11	89	7	0	4	97	2	1	1	4.54	5.71	—	—
29	Bathe patient or help patient to bathe (in bed, tub, shower)	85	2	0	13	85	8	0	7	95	5	0	0	4.94	7.18	3	7.00
26	Give a routine shampoo to patient	70	6	2	22	86	7	0	7	90	7	0	3	3.22	4.09	1	3.00
66	Move patient such as: bed to/from chair - cart to/from chair	80	11	1	8	75	21	4	0	92	7	0	1	4.76	6.13	1	4.00
77	Give an enema, such as: soap suds, tap water, oil retention	80	11	0	9	75	21	4	0	83	16	1	0	5.34	6.13	1	2.00



TABLE D-2 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph.	$\bar{X}$ -Emph.
13	Assist patient in recreational or occupational therapy, such as: encouragement - physical help	71	9	2	18	57	29	0	14	73	20	3	4	4.22	4.55	3	2.67
19	Insert rectal or vaginal suppositories	61	18	1	20	39	25	18	18	52	34	9	5	4.94	4.68	4	3.75
2	Collect a specimen, such as: sputum - urine - stool	85	8	1	6	89	7	4	0	92	8	0	1	5.52	5.85	2	5.00
Sub-Means		75	8	1	16	73	16	3	8	83	12	2	3	4.52	5.32	3	3.28
Means		72	6	1	21	72	13	2	13	82	9	1	8	4.08	4.81	5	2.85

TABLE D-3

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Theor. $\bar{X}=4.03$	Theor. $\bar{X}=4.03$		
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph.	$\bar{X}$ -Emph.
Factor I-B: Specialized functions, (Reported by percents) OR or Emergency Room																	
46	Apply tourniquet to extremity for control of hemorrhage	9	14	19	58	7	7	29	57	10	21	35	34	4.18	3.58	48	4.27
99	Check function- ing of tubes for patient with chest tube drainage	25	30	5	40	7	21	36	36	14	40	30	16	5.47	4.61	6	5.67
75	Set up equipment for aseptic surgical procedures in locations other than operating room, such as: blood exchange, oral surgery, paracentesis, minor surgery, circumcision	20	20	14	46	18	11	28	43	10	31	40	20	4.01	3.23	30	2.47
45	Assist during procedures such as: thoracentesis-lumbar puncture	33	18	15	34	18	43	14	25	22	40	28	10	4.73	3.70	6	3.70

TABLE D-3 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		1	2	3	4	1	2	3	4	1	2	3	4	Theor. $\bar{X}$ =4.03	$\bar{X}$ Emph. #-Emph. $\bar{X}$ -Emph.		
3	Scrub for surgery or delivery	12	8	8	72	14	7	7	72	9	16	30	45	3.08	2.24	45	1.60
65	Regulate flow of blood transfusions	18	28	12	42	7	29	21	43	5	25	31	39	4.95	3.52	97	3.96
Means		19	20	12	49	12	20	22	46	12	29	32	27	4.40	3.48	39	3.61

TABLE D-4

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Employed LPN's Supervising RN's RN Faculty Members															Employed LPN's		Faculty Members	
Funct. Number	Description	Responsibility Level												Importance Theor. $\bar{X}$ =4.03 $\bar{X}$ Import.	Emphasis Theor. $\bar{X}$ =4.03 $\bar{X}$ Emph. $\#$ -Emph. $\bar{X}$ -Emph.			
		1	2	3	4	1	2	3	4	1	2	3	4					
Factor II: Administration of medications (Reported by percents)																		
49	"Pour" and give oral medications	51	19	4	26	36	28	11	25	28	45	17	10	5.69	5.27	12	4.42	
81	Give intramuscular injections	48	19	3	30	29	36	14	21	26	45	17	13	5.19	4.91	23	3.00	
73	Give subcutaneous injections	43	17	7	33	32	32	11	25	25	40	19	17	4.64	4.77	24	3.50	
94	Instill medication for the eye, ear or nose	55	26	3	16	29	32	21	18	32	44	14	11	5.02	4.27	12	2.33	
76	Compute fractional doses of medicine	16	23	18	43	11	21	39	29	2	20	36	42	4.06	4.00	99	4.38	
79	Note and transcribe doctor's orders on medicine cards, Kardex, etc.	34	18	10	38	11	25	21	43	11	27	23	40	4.79	3.14	88	3.55	
60	Teach a person to inject his own insulin	19	20	4	57	11	21	29	39	6	30	27	37	3.64	3.11	48	2.44	

TABLE D-4 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	f-Emph.	$\bar{X}$ -Emph.
93	Take verbal medi- cation or treat- ment order from doctor	36	22	6	36	18	32	11	39	4	11	8	77	4.19	4.39	172	4.87
19	Insert rectal or vaginal supposi- tories	61	18	1	20	39	25	18	18	52	34	9	5	4.94	4.68	4	3.75
Means		40	20	6	34	24	28	19	29	21	32	19	28	4.68	4.28	54	3.47

TABLE D-5

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Employed LPN's Supervising RN's RN Faculty Members																Employed LPN's		Faculty Members	
Funct. Number	Description	Responsibility Level												Importance	Emphasis				
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Theor. $\bar{X}=4.03$	$\bar{X}$ Emph. $\bar{X}$ Emph.				
1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.							
Factor III-A: Basic nursing in inst. setting (Reported by percents)																			
99	Check functioning of tubes for patient with chest drainage	25	30	5	40	7	21	36	36	14	40	30	16	5.47	4.61	6	5.67		
59	Give nursing care (not necessarily medical) to patient following cataract or retinal surgery	44	12	6	38	29	39	7	25	33	37	12	18	4.62	4.37	4	2.50		
52	Give oral hygiene to the patient with a fractured jaw	34	16	6	44	36	32	25	7	31	39	16	14	4.01	4.18	16	2.88		
27	Give a bath or treatment to a patient in a croupette or oxygen tent	50	14	1	35	54	32	3	11	57	31	5	8	4.66	5.27	3	5.00		
62	Assist patient in postural drainage	53	17	4	26	46	36	4	14	60	29	4	8	4.40	4.37	3	5.60		



TABLE D-5 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4				
43	Adjust apparatus of a patient in traction, such as: orthopedic-neck - pelvic	34	20	8	38	14	39	25	22	14	31	31	23	4.26	3.73	49	3.57
25	Observe vital signs following a general anesthesia	51	20	1	28	39	36	18	7	46	36	8	10	6.65	6.47	5	4.80
9	Strain urine for stones	58	9	0	33	68	18	3	11	84	12	1	3	4.69	4.84	2	3.00
35	Give urinary bladder in-stillations or irrigations	55	23	0	22	32	43	11	14	43	39	12	5	5.25	5.32	6	2.00
67	Apply and remove artificial limb	31	13	6	50	36	36	3	25	47	29	16	9	3.08	3.07	9	2.44
96	Instruct paralyzied patient how to establish pattern for habit formation of elimination	38	16	3	43	25	32	14	29	23	36	21	21	3.82	3.70	10	2.40
Means		43	17	4	36	35	33	14	18	41	33	14	12	4.63	4.54	10	3.62

TABLE D-6

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		1	2	3	4	1	2	3	4	1	2	3	4				
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Theor. $\bar{X}=4.03$	Theor. $\bar{X}=4.03$		
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	$\bar{X}$ Emph.	$\bar{X}$ Emph.
Factor III-B: Basic nursing as an intermediary or extension of physicians (Reported by percents)																	
93	Take verbal medication or treatment order from doctor	36	22	6	36	18	32	11	39	4	11	8	77	4.19	4.39	172	4.87
10	Circulate in operating room or delivery room	6	7	9	78	3	11	11	75	6	20	27	48	2.94	2.16	54	1.74
79	Note and transcribe doctor's orders on medicine cards, Kardex, etc.	34	18	10	38	11	25	21	43	11	27	23	40	4.79	3.14	88	3.55
50	Operate autoclave to sterilize instruments or treatment pads	38	3	2	57	32	4	7	57	37	20	11	33	2.97	2.02	32	1.56
3	Scrub for surgery or delivery	12	8	8	72	14	7	7	72	9	16	30	45	3.08	2.24	45	1.60
85	Assist the physician with rounds	49	21	4	26	43	25	11	21	29	37	12	21	4.24	2.85	22	2.68

TABLE D-6 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Employed LPN's Supervising RN's RN Faculty Members														Employed LPN's		Faculty Members	
Funct. Number	Description	Responsibility Level												Importance Theor. $\bar{X}$ =4.03 $\bar{X}$ Import.	Emphasis Theor. $\bar{X}$ =4.03 $\bar{X}$ Emph. #-Emph. $\bar{X}$ -Emph.		
		1	2	3	4	1	2	3	4	1	2	3	4				
51	Fill out requisitions to special departments such as laboratory or x-ray	47	21	6	26	29	32	14	25	42	31	14	14	4.22	3.23	20	1.90
72	Complete and sign incident or unusual report forms	37	29	10	24	25	36	7	32	20	30	31	19	3.74	3.41	39	3.18
Means		32	16	7	45	22	22	11	45	20	24	19	37	3.77	2.93	59	2.64

(Reported by percents)

TABLE D-7

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		1	2	3	4	1	2	3	4	1	2	3	4	Theor. $\bar{X}=4.03$	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph. $\bar{X}$ -Emph.
Factor IV: Maternity (Reported by percents)																	
18	Message fundus of newly deliv- ered mother	25	9	4	62	4	21	7	68	24	25	11	40	3.31	4.28	15	3.73
69	Give breast and nipple care to the new mother	33	6	1	60	36	11	0	53	47	14	4	36	3.08	4.22	5	2.20
82	Complete newborn nursery admission procedure, such as: footprints, weight, bath	23	9	2	66	18	7	7	68	29	27	7	37	3.06	4.06	9	2.11
6	Take the fetal heart tone	18	10	6	66	11	7	7	75	23	27	14	37	3.29	3.83	13	2.85
3	Scrub for surgery or delivery	12	8	8	72	14	7	7	72	9	16	30	45	3.08	2.24	45	1.60
10	Circulate in operating room or delivery room	6	7	9	78	3	11	11	75	6	20	27	48	2.94	2.16	54	1.74
Means		20	8	5	67	14	11	7	68	23	22	15	40	3.12	3.47	25	2.37

TABLE D-8

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Theor. $\bar{X}=4.03$	Theor. $\bar{X}=4.03$		
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph.	$\bar{X}$ -Emph.
Factor V-A: Simple nursing care (Reported by percents)																	
87	Record condition of the skin or discharges, such as: appearance, odor, color	86	8	0	6	71	25	0	4	90	9	0	1	6.52	6.95	1	5.00
98	Observe condition of the skin or body discharges, such as: color, odor, appearance	83	11	0	6	75	18	3	4	91	8	0	1	6.76	7.24	2	6.50
90	Record intake and output for an 8-hour or 24-hour period	80	5	0	15	82	18	0	0	89	10	0	1	5.66	6.18	3	6.67
74	Admit patient to nursing unit and obtain initial nurse's notes chart information	78	11	0	11	64	29	7	0	82	17	1	1	5.86	6.19	2	1.00
48	Attend nursing unit report to receive condition and status of patients	75	14	0	11	78	14	4	4	83	13	2	2	6.38	6.41	5	2.60

TABLE D-8 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		1	2	3	4	1	2	3	4	1	2	3	4	Theor. $\bar{X}=4.03$	Theor. $\bar{X}=4.03$		
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph. #-Emph. $\bar{X}$ -Emph.		
34	Record on individual patient chart observations made or treatment given by you	82	9	0	9	57	22	7	14	76	8	1	16	6.74	7.00	20	5.25
53	Obtain temperature, pulse, and respirations	91	4	1	4	93	4	3	0	95	5	0	0	6.98	7.66	2	8.50
29	Bathe patient or help patient to bathe (in bed, tub, shower)	85	2	0	13	85	8	0	7	95	5	0	0	4.94	7.18	3	7.00
55	Prepare and position patient to eat	86	3	0	11	89	7	0	4	97	2	1	1	4.54	5.71	—	—
77	Give an enema, such as: soap suds, tap water, oil retention	80	11	0	9	75	21	4	0	83	16	1	0	5.34	6.13	1	2.00

(Reported by percents)



TABLE D-8 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members										Employed LPN's		Faculty Members	
		Responsibility Level										Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Theor. $\bar{X}=4.03$	Theor. $\bar{X}=4.03$
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph. #-Emph. $\bar{X}$ -Emph.
8	Remove potentially hazardous objects such as glassware, razor, or belts from a depressed patient	64	19	1	16	54	36	7	3	62	27	5	6	5.58	4.96 6 2.50
Means		81	9	1	10	75	18	3	4	86	11	1	2	5.94	6.51 4 4.27

(Reported by percents)

TABLE D-9

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Employed LPN's		Supervising RN's												RN Faculty Members				Employed LPN's		Faculty Members	
Funct. Number	Description	Responsibility Level												Importance	Emphasis						
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev			Theor. $\bar{X}$ =4.03	$\bar{X}$ Emph. #	-Emph. $\bar{X}$ -emph.			
		1	2	3	4	1	2	3	4	1	2	3	4								
(Reported by percents)																					
Factor V-B: Surgical																					
10	Circulate in operating room or delivery room	6	7	9	78	3	11	11	75	6	20	27	48	2.94	2.16	54 1.74					
3	Scrub for surgery or delivery	12	8	8	72	14	7	7	72	9	16	30	45	3.08	2.24	45 1.60					
74	Admit patient to nursing unit and obtain initial nurse's notes chart information	78	11	0	11	64	29	7	0	82	17	1	1	5.86	6.19	2 1.00					
46	Apply tourniquet to extremity for control of hemorrhage	9	14	19	58	7	7	29	57	10	21	36	34	4.18	3.58	48 4.27					
50	Operate autoclave to sterilize instruments or treatment pads	38	3	2	57	32	4	7	57	37	20	11	33	2.97	2.02	32 1.56					

TABLE D-9 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Theor. $\bar{X}=4.03$	Theor. $\bar{X}=4.03$		
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph.	$\bar{X}$ -Emph.
45	Assist during procedures such as: thoracentesis- lumbar puncture	33	18	15	34	18	43	14	25	22	40	28	10	4.73	3.70	6	3.70
Means		29	10	9	52	23	17	12	48	28	22	22	28	3.96	3.32	31	2.31

TABLE D-10

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	Theor. $\bar{X}=4.03$	$\bar{X}$ Emph. $\bar{X}$ Emph.	$\bar{X}$ Emph.	$\bar{X}$ Emph.
Factor VI-A: Patient activities (Reported by percents)																	
56	Take blood pressure	88	7	1	4	89	11	0	0	92	8	1	0	6.88	7.37	—	—
53	Obtain temperature, pulse, and respirations	91	4	1	4	93	4	3	0	95	5	0	0	6.98	7.66	2	8.50
57	Apply side rails to a bed of a patient who becomes confused	72	11	1	16	71	25	0	4	80	18	1	2	5.58	6.02	2	5.00
41	Instruct patient to deep breathe	84	4	1	11	86	11	3	0	86	12	1	2	5.50	5.56	3	2.67
2	Collect a specimen, such as: sputum-urine - stool	85	8	1	6	89	7	4	0	92	8	0	1	5.52	5.85	2	5.00
66	Move patient such as: bed to/from chair-cart to/from chair	80	11	1	8	75	21	4	0	92	7	0	1	4.76	6.13	1	4.00
4	Perform a urine analysis for sugar	63	6	0	31	75	14	7	4	86	9	1	5	5.22	5.45	3	1.33
Means		80	7	1	12	83	13	3	1	89	9	1	2	5.78	6.29	2	3.79

TABLE D-11

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis	Theor. $\bar{X}$ =4.03	$\bar{X}$ -Emph. $f$ -Emph. $\bar{X}$ -Emph.
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4				
Factor VI-B: Patient - institutional (Reported by percents)																	
92	Explain the current condition of a patient to the immediate family	22	22	11	45	7	21	18	54	4	19	22	55	2.86	3.24	109	3.85
85	Assist the physician with rounds	49	21	4	26	43	25	11	21	29	37	12	21	4.25	2.85	22	2.68
93	Take verbal medication or treatment order from doctor	36	22	6	36	18	32	11	39	4	11	8	77	4.19	4.39	172	4.87
36	Observe and report drainage on a dressing*	13	18	16	53	4	25	21	50	82	16	1	1	2.94	6.60	3	4.67
12	Perform rectal examination of patient, such as: patient in labor-patient with fecal impaction	38	19	3	40	32	18	11	39	16	20	22	42	3.58	3.17	70	2.90
54	Make patient assignments to other nursing personnel	30	18	7	45	14	25	14	47	6	22	19	53	2.69	1.42	69	1.39

TABLE D-11 (Cont'd)

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		1	2	3	4	1	2	3	4	1	2	3	4	Theor. $\bar{X}$ =4.03	Theor. $\bar{X}$ =4.03	$\bar{X}$ Emph.	#-Emph. $\bar{X}$ -Emph.
79	Note and transcribe doctor's orders on medicine cards, Kardex, etc.	34	18	10	38	11	25	21	43	11	27	23	40	4.79	3.14	88	3.55
39	Obtain signatures for legal documents, such as: permission to operate, consent for autopsy, perform tests, or wills	22	21	10	47	11	11	11	67	14	25	17	45	3.50	3.07	92	3.25
Means		31	20	8	41	17	23	15	45	21	22	15	42	3.60	3.49	78	3.40

(Reported by percents)



TABLE D-12

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	$f$ -Emph.	$\bar{X}$ -Emph.
Factor VII: Genito-urinary (Reported by percents)																	
42	Catheterize patient	64	18	4	14	50	36	7	7	53	36	8	4	5.88	5.97	3	6.67
38	Insert in-dwelling catheter	53	20	3	24	43	43	3	11	49	32	11	9	5.23	5.69	7	3.29
71	Administer vaginal douche	63	14	0	23	46	47	0	7	57	29	1	14	4.58	4.89	1	2.00
35	Give urinary bladder instillations or irrigations	55	23	0	22	32	43	11	14	43	39	12	5	5.25	5.32	6	2.00
19	Insert rectal or vaginal suppositories	61	18	1	20	39	25	18	18	52	34	9	5	4.94	4.68	4	3.75
32	Remove fecal impaction	65	13	1	21	57	22	7	14	41	29	16	14	4.50	4.17	28	3.07
Means		60	18	1	21	44	36	8	12	49	33	10	8	5.06	5.12	8	3.46

TABLE D-13

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4	$\bar{X}$ Import.	$\bar{X}$ Emph.	#-Emph.	$\bar{X}$ -Emph.
Factor VIII-A: Technical nursing skills-- (Reported by percents) intravenous, etc.																	
17	Discontinue I.V. solutions	62	14	2	22	46	36	7	11	37	40	12	11	5.29	3.92	26	3.35
61	Add additional I.V. solution to continuous I.V. solution or transfusion	26	34	7	33	18	29	32	21	9	30	25	37	5.19	3.69	87	3.63
65	Regulate flow of blood transfusions	18	28	12	42	7	29	21	43	5	25	31	39	4.95	3.52	97	3.96
Means		35	25	7	32	24	31	20	25	17	32	22	29	5.14	3.71	70	3.65

TABLE D-14

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Employed LPN's Supervising RN's RN Faculty Members														Employed LPN's		Faculty Members	
Funct. Number	Description	Responsibility Level												Importance  Theor. $\bar{X}$ =4.03  $\bar{X}$ Import.	Emphasis  Theor. $\bar{X}$ =4.03  $\bar{X}$ Emph. #-Emph. $\bar{X}$ -Emph.		
		1	2	3	4	1	2	3	4	1	2	3	4				
Factor VIII-B: Technical nursing skills- (Reported by percents) physical and mental rehabilitation																	
13	Assist patient in recreational or occupational therapy, such as: encouragement - physical help	71	9	2	18	57	29	0	14	73	20	3	4	4.22	4.55	3	2.67
96	Instruct paralyzed patient how to establish pattern for habit formation of elimination	38	16	3	43	25	32	14	29	23	36	21	21	3.82	3.70	10	2.40
8	Remove potentially hazardous objects such as glassware, razor, or belts from a depressed patient	64	19	1	16	54	36	7	3	62	27	5	6	5.58	4.96	6	2.50
Means		57	15	2	26	46	32	7	15	53	27	10	10	4.53	4.40	6	2.52

TABLE D-15

RESPONSIBILITY LEVEL FOR NURSING FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S, THEIR RN SUPERVISORS,  
AND RN FACULTY MEMBERS; IMPORTANCE OF FUNCTIONS AS DETERMINED BY EMPLOYED LPN'S  
AND EMPHASIS GIVEN FUNCTIONS BY RN FACULTY MEMBERS.

(Table is based on the factors determined for the importance sort completed by employed LPN's, detailed in Part I.)

Funct. Number	Description	Employed LPN's Supervising RN's RN Faculty Members												Employed LPN's		Faculty Members	
		Responsibility Level												Importance	Emphasis		
		Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev	Ind	Shar	Dir	Nev				
		1	2	3	4	1	2	3	4	1	2	3	4				
Factor IX: Non-nursing patient services (Reported by percents)																	
88	Refer a patient to an outside agency, such as: health, social, religious	16	16	8	60	7	0	29	64	9	19	31	42	2.36	2.31	54	2.09
97	Refer patient to an agency inside the hospital, such as: social service, chaplain	30	20	9	41	7	29	18	46	20	23	30	26	3.04	2.73	33	2.27
51	Fill out requisitions to special departments such as laboratory or x-ray	47	21	6	26	29	32	14	25	42	31	14	14	4.22	3.23	20	1.90
Means		31	19	8	42	14	20	20	46	24	24	25	27	3.21	2.76	36	2.09